

**Supplementary file 2**

*Acaryochloris marina* MBIC11017 uid58167 TnpPred annotation in genbank format (.gbk)

LOCUS NC\_009925 0 bp DNA linear UNK  
ACCESSION unknown  
COMMENT This looks like a good IS fragment prediction  
FEATURES Location/Qualifiers  
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/db\_xref="taxon:329726"  
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295 length is 270aa with 9 gaps, 1 stops, absolute frame=  
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CDS 19537..19776  
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CDS 57724..58665

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is 129aa with 20 gaps, 0 stops, absolute frame= Plus1"
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36.43%, between model( 258 aa) positions 148; 241 length
is 92aa with 2 gaps, 1 stops, absolute frame= Plus1"
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36.40%, between model( 239 aa) positions 1; 87 length is
88aa with 1 gaps, 0 stops, absolute frame= Plus1"
CDS
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33.77%, between model( 154 aa) positions 1; 52 length is
47aa with 5 gaps, 0 stops, absolute frame= Plus1"

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CDS 689482..689604  
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coverage= 30.07%, between model( 153 aa) positions 1; 46  
length is 41aa with 5 gaps, 0 stops, absolute frame= Plus1"

CDS 689875..690138  
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TAQLQ---RQGYCVNHKRVARLMRQIGIMAKTKVK-RKRTTNSEHSfpRYGNRVLNLS  
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frame= Plus1"

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frame= Plus1"

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QEFVYLAVVMDVFTRAIRGWHLRSRHIDQQLTLRALNKALER---ATPEIHHSQGVQ  
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HIEQFLEDvYMHKRIHSSLGYLTPCEYEQQWRQ"  
/note="IS3\_IS150\_ORF1 e-value= 4.3e-49 complete sequence  
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frame= Plus1"

CDS 850441..851325

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QLTLRALNKALERAT-PEIHHS DQGVQYAAA---AYMQLLQQHQVQISMAEVGQAWQ
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/note="IS481 e-value= 2.9e-08 complete sequence hit
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length is 295aa with 58 gaps, 0 stops, absolute frame=
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CDS
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frame= Plus1"
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Plus1"
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302 length is 284aa with 31 gaps, 0 stops, absolute
frame= Plus1"
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HKRIHSSLGYLTPCEYEQQWRQQ"
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frame= Plus1"
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/note="IS3_IS3_ORF1      e-value= 9.5e-54 complete sequence
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286 length is 272aa with 15 gaps, 0 stops, absolute
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frame= Plus1"
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 frame= Plus1"  
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 104 length is 53aa with 5 gaps, 0 stops, absolute frame=  
 Plus1"  
 CDS 850618..851301  
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 SSLGYLTPCEYEQQWRQNNH"  
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 frame= Plus1"  
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 VS-K RRTWRKLHLSVDESTGEILTGVVTTNDVQDG EVFEDLLEGIDD-----EIEQVSAD-G

AYDQSHCYDALMERNATAAIPPRKNA-----KIWQHGNC--NApphpRDQ  
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TFGWTMEVVKRPEEQQGFEVLPRRWWVERTFAWFGHYRRLSKDYEYLPTTSEMMLYAA  
MVNLMLKRLAXIFSNTLLEAV"  
/note="IS5\_IS1031 e-value= 2.7e-109 complete sequence hit  
coverage= 100%, between model( 295 aa) positions 1; 295  
length is 287aa with 10 gaps, 2 stops, absolute frame=  
Plus1"  
CDS 1334545..1335384  
/colour="255 0 0"  
/evidence=predicted  
/translation="IQVELRGSIHXPLNLKMVRHPYDTDLDLQWELLRPLLPKAKSG  
-----GRPRRVNLLAVVNAIFYLLRSGCPWRL--IPHD  
FPAWQTVYTYFRQWEADGTWERLNRALREKLRIQAG--RHRHPSAACVDSQSVDKTAG  
A-----  
-----AQEKGFDDGGKKVKGRKRT  
ILVDTMGLLIGA-----TVHSARRSDHQGMILLGLWFSAFWQSIOLIW  
TDQTFGGQAFTAWFQKTFGWTMEVVKRPEEQQGFEVLPRRWWVERTFAWFGHYRRLSK  
DYEYLPTTSEMMLYAAVNMLKRLAXIFS"  
/note="IS5\_IS5 e-value= 6.1e-15 complete sequence hit  
coverage= 100%, between model( 422 aa) positions 1; 422  
length is 280aa with 142 gaps, 2 stops, absolute frame=  
Plus1"  
CDS 1334599..1335378  
/colour="255 0 0"

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/evidence=predicted
/translation="RHPYTDLTLDQWELLRPLLPKAK-----SGGRPRRVNLLAV
VNAIFYLLRSGCPWRLIPHDFPAWQTVYTYFRQWEADGTWERLNRALREKLRIQAGRH
RHPSAACVDSQSVDKTAGAAQE--KGFDGGKKVKGRKRTILVDTMGLLIGATVHSARRS
DHQ-GMILLGLWFSAFWQSIQLIWTDQTFGGQAFTAWFQKTFGWTMEVVKRPEEQQGF
EVLPRRWVVERTFAWFGHYRRLSKDYEYLPTTSEMMLYAAMVNMLKRLAXI"
/note="IS5_IS1031 e-value= 3.5e-110 fragment hit
coverage= 91.53%, between model( 295 aa) positions 17;
286 length is 260aa with 10 gaps, 1 stops, absolute
frame= Plus1"
CDS 1334629..1334862
/colour="255 0 0"
/evidence=predicted
/translation="DQWELLRPLLP--KAKSGGRPRRVNLLAVVNAIFYLLRSGCPWR
LIPHDFPAWQTVYTYFRQWEADGTWERLNRALREKL"
/note="IS5_IS427 e-value= 7.9e-16 fragment hit coverage=
27.03%, between model( 296 aa) positions 129; 208 length
is 78aa with 2 gaps, 0 stops, absolute frame= Plus1"
CDS 1334704..1334931
/colour="255 0 0"
/evidence=predicted
/translation="AVVNAIFYLLRSGCPWRL--IPHDFPAWQTVYTYFRQWEADGTW
ERLNRALREKLRIQAG---RHRHPSAACVDSQSVDKT"
/note="IS5_IS5 e-value= 7.9e-09 fragment hit coverage=
19.19%, between model( 422 aa) positions 79; 159 length
is 76aa with 5 gaps, 0 stops, absolute frame= Plus1"
CDS 1334932..1335384
/colour="255 0 0"
/evidence=predicted
/translation="GAAQEKGFDGGKKVKGRKRTILVDTMGLLIGA-----
---TVHSARRSDHQGMILLGLWFSAFWQSIQLIWTDQTFGGQAFTAWFQKTFGWTMEV
VKRPEEQQGFEVLPRRWVVERTFAWFGHYRRLSKDYEYLPTTSEMMLYAAMVNMLK
LAXIFS"
/note="IS5_IS5 e-value= 1.2e-15 fragment hit coverage=
39.34%, between model( 422 aa) positions 257; 422 length
is 151aa with 15 gaps, 1 stops, absolute frame= Plus1"
CDS 1474789..1475553
/colour="255 0 0"
/evidence=predicted
/translation="----TGVYKQTFkrMLHAWHTHHLGRSN--AGRPPKLCRPDQL
LVALQYWREYRTYFHIAGDWEVSESTVCRIVHQVETALMNSGLFRLPGQKSLLQGFER
PDVVVMDVTETPIERPQKRQKAYYSGKKRDIPSNARLSLTAT--LXRLSV-----
XALAQAVGMIFrssrfqvSISIQIPRVCKIADIKGLOPT--TPTAM---FLSRSHNT
VNXLPCSESITVlxvknEWAlntlNRSLKIFRILSERYNRRRYTLRCNLIAALYNH
EL"
/note="IS5_ISL2 e-value= 2.2e-49 complete sequence hit
coverage= 100%, between model( 260 aa) positions 1; 260
length is 255aa with 23 gaps, 3 stops, absolute frame=
Plus1"
CDS 1474852..1475160
/colour="255 0 0"
/evidence=predicted
/translation="RSNAGRPPKLCRPDQLLVALQYWREYRTYFHIAGDWEVSESTVC
RIVHQVETALMNSGLFRLPGQKSLLQGFERPDVVVMDVTETPIERPQKRQKAYYSGKK
R"
/note="IS5_ISL2 e-value= 1.5e-44 fragment hit coverage=
39.62%, between model( 260 aa) positions 27; 129 length
is 103aa with 0 gaps, 0 stops, absolute frame= Plus1"
CDS 1475446..1475553
/colour="255 0 0"

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/evidence=predicted  
/translation="NRSLKIFRILSERYRNRRRYTLRCNLIAALYNHEL"  
/note="IS5\_ISL2 e-value= 1.1e-16 fragment hit coverage= 13.85%, between model( 260 aa) positions 225; 260 length is 36aa with 0 gaps, 0 stops, absolute frame= Plus1"  
CDS 1499707..1499970  
/colour="255 0 0"  
/evidence=predicted  
/translation="LFYFLMQCPLCGHPK-THKHGKTSKGSQRYRCPHCQQTFS-EtfDTLCYRRQiSPETIQTILQAHVEGSSLRGLSRITGVAYNTCVSVVR"  
/note="IS1\_ORF1 e-value= 1.7e-15 fragment hit coverage= 36.40%, between model( 239 aa) positions 1; 87 length is 88aa with 2 gaps, 0 stops, absolute frame= Plus1"  
CDS 1585042..1585257  
/colour="255 0 0"  
/evidence=predicted  
/translation="REIHEAIGVSIRTIERVRMRFVEEG---LEAAINQRsGAGRKRKIQGEQEAHLIALRCSEPPVG---HARWTLRLAD"  
/note="IS630 e-value= 9.9e-08 fragment hit coverage= 20.74%, between model( 376 aa) positions 44; 121 length is 72aa with 7 gaps, 0 stops, absolute frame= Plus1"  
CDS 1602370..1602585  
/colour="255 0 0"  
/evidence=predicted  
/translation="REIHEAIGVSIRTIERVRMRFVEEG---LEAAINQRsGAGRKRKIQGEQEAHLIALRCSEPPVG---HARWTLRLAD"  
/note="IS630 e-value= 9.9e-08 fragment hit coverage= 20.74%, between model( 376 aa) positions 44; 121 length is 72aa with 7 gaps, 0 stops, absolute frame= Plus1"  
CDS 2373475..2374293  
/colour="255 0 0"  
/evidence=predicted  
/translation="-IEYPQFLQLLEQAEALKHNERKaeiexhksRVNAK-GGGRKPLL SVAEEVCLCLFYLRHYPTFEVLGLQFGVSKSEANDTVHYWLMLRVLL-----PASLL EQVDSNPsdyAIVqewltqfqfqlIVDTFEQARERPIdnDEQRSYFSGKKQQHTFKSQIV TLPGGKDIVDAIAGkKGPTSDISVFREHQSQFAPGQGFDDKAYVGAQNVQ---TPH KKPRGKELETPKQKAQNKKFsSTRRIFVEHTIRLVRIFRVAQERFRLRHDTYEQVILTV CGLVRLRL"  
/note="IS5\_ISL2 e-value= 1.6e-11 complete sequence hit coverage= 100%, between model( 260 aa) positions 1; 260 length is 273aa with 11 gaps, 0 stops, absolute frame= Plus1"  
CDS 2373877..2374236  
/colour="255 0 0"  
/evidence=predicted  
/translation="ORSYFSGKKQQHTFKSQIVTLPGGKDIVDAIAGkKGPTSDISVF REHQSQFAPGQGFDDKAYVGAQNVQ---TPHKKPRGKELETPKQKAQNKKFsSTRRI FVEHTIRLVRIFRVAQERFRLR"  
/note="IS5\_ISL2 e-value= 8.7e-11 fragment hit coverage= 46.92%, between model( 260 aa) positions 120; 241 length is 120aa with 4 gaps, 0 stops, absolute frame= Plus1"  
CDS 2559835..2560116  
/colour="255 0 0"  
/evidence=predicted  
/translation="SMECPYCQSEK-ILKRGFDs1qdgtLVQRYQCKDCNRRFN-ERT GTPMARLtasSVVSYAIKARTEGMGVRSAGRTEFGKSHTIMRWEKRLADQA"  
/note="IS1\_ORF1 e-value= 3.2e-11 fragment hit coverage= 37.24%, between model( 239 aa) positions 5; 93 length is 94aa with 2 gaps, 0 stops, absolute frame= Plus1"  
CDS 2630473..2630631

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/colour="255 0 0"
/evidence=predicted
/translation="HHPHPRVQRRMEVLYLKSQGLPHAQICOLCQISRPTLAKTLRLY
QQGGIEGLK"
/note="IS481 e-value= 1.1e-08 fragment hit coverage=
15.10%, between model( 351 aa) positions 1; 53 length is
53aa with 0 gaps, 0 stops, absolute frame= Plus1"
CDS 2982304..2983041
/colour="255 0 0"
/evidence=predicted
/translation="----TGVYKQTF-KRMLHAWHTYH1SHSNAERPPKLCRPDQLL
VALQYWREYRTYFHIAGDWDVSESTVCRIVQQVESALMNSGLFRLPGKKHLIQGFERP
DVVVMDVTETPIERPQKGQKAYYSGKQRDIPSNARLSLTVALXRLSALT-----
-LAKVVGMIFrssrfqvSTSIQIprvCKIADIKGQPI-----TPIAM---FLSRSH
NTVNXLPSSESTTVLXRNEWALNTLIAAXRFSEFCRSAIVIVVATRCGVTX"
/note="IS5_ISL2 e-value= 2.8e-20 complete sequence hit
coverage= 100%, between model( 260 aa) positions 1; 260
length is 246aa with 25 gaps, 5 stops, absolute frame=
Plus1"
CDS 2982364..2982675
/colour="255 0 0"
/evidence=predicted
/translation="SHSNAERPPKLCRPDQLLVALQYWREYRTYFHIAGDWDVSESTV
CRIVQQVESALMNSGLFRLPGKKHLIQGFERPDVVMDVTETPIERPQKGQKAYYSGK
KR"
/note="IS5_ISL2 e-value= 1.3e-41 fragment hit coverage=
40%, between model( 260 aa) positions 26; 129 length is
104aa with 0 gaps, 0 stops, absolute frame= Plus1"
CDS 3974686..3975072
/colour="255 0 0"
/evidence=predicted
/translation="YADESGMDHRDEYDY-AYGPKGE-----RVYA-LKTG-
RRSGRVNMIAALRAKQL--MAPFTIEGACNRTVFELwLERCLIPv1KPGQKLVI--DN
ATFHKGQIQELVEKAG--CEVWYLPPYSPDLNKIERSWSWIKSRIR"
/note="IS630 e-value= 1.1e-13 fragment hit coverage=
38.83%, between model( 376 aa) positions 188; 333 length
is 129aa with 20 gaps, 0 stops, absolute frame= Plus1"
CDS 3975325..3976020
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS
hLSDkrLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK
PQIAAGMIRQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP
AEQAVFAEPWQSFERTFSNGTTETRYrQEIIYGqrhhQKRY"
/note="IS4 e-value= 4.7e-14 fragment hit coverage=
51.23%, between model( 486 aa) positions 1; 249 length is
232aa with 27 gaps, 0 stops, absolute frame= Plus1"
CDS 3975325..3976452
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS
hLSDkrLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK
PQIAAGMIRQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP
AEQAVFAEPWQSFERTFSNGT-----TETRYR
QEIIYGQRHHQKRYWLLTDPQTL PENSTS-----YVMAA
APE---IKLDEIGDCYGFRTWIEYGLKQSKD-TLGWADFRMTHYEQIEKWWEIVMSA
FLMVSFLFADVFNDS-----CPVAHQHFAQHPwWDNQNG
WKNLLNNVR--LIIQPLIS----WNLLKRWLEVFPSRALKKGF"

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/note="IS4 e-value= 9.9e-07 complete sequence hit  
coverage= 100%, between model( 486 aa) positions 1; 486  
length is 376aa with 117 gaps, 0 stops, absolute frame=  
Plus1"  
CDS 4217206..4217592  
/colour="255 0 0"  
/evidence=predicted  
/translation="YADESGMDHRDEYDY-AYGPKGE-----RVYA-LKTG-  
RRSGRVNMIAALRAKQL--MAPFTIEGACNRTVFELwLERCLIPv1KPGQKLVI--DN  
ATFHKGQIQELVEKAG--CEWYLPPYSPDLNKIERSWSWIKSIR"  
/note="IS630 e-value= 1.1e-13 fragment hit coverage=  
38.83%, between model( 376 aa) positions 188; 333 length  
is 129aa with 20 gaps, 0 stops, absolute frame= Plus1"  
CDS 4225801..4226796  
/colour="255 0 0"  
/evidence=predicted  
/translation="CIAVAILRRTXTREVFSFCSVMPKIYSYd1RCKVIDAIeLDGM  
RPSEASELFHIRRNTINQWQHLKAETG----DLHPKP-VHCPDHSHKIK-----  
DWDKFRAFAYKHRHTQAQMAQLWDGE---ISERTISRALQNIGFT-RKKTYGYR--  
ERD--EHKR---AAFIKRLSTVDP-DDIVYADESGMDHRDEYDY-AYGPKGE-----  
-----RVYA-LKSG-TRKGRVNMIAMLAQQL--MAPFTIEGACNRTVFEvw1ERCL  
IPMLKPGQKLVI--DNATFHKAGRIQELVEKAG--CEWYLPPYSPDLNKIERSWSWI  
K--SRIRHOLDHFGLREAMEHVLHLSXIEWRLLXNKLCKNNLKRIIL"  
/note="IS630 e-value= 1.2e-10 complete sequence hit  
coverage= 100%, between model( 376 aa) positions 1; 376  
length is 332aa with 50 gaps, 3 stops, absolute frame=  
Plus1"  
CDS 4226083..4226673  
/colour="255 0 0"  
/evidence=predicted  
/translation="AFAYKHRHKTOAQMAQLWDGEISERTISRALQNIGFT-RKKTYG  
YR--ERD--EHKR---AAFIKRLSTVDP-DDIVYADESGMDHRDEYDY-AYGPKGE-----  
-----RVYA-LKSG-TRKGRVNMIAMLAQQL--MAPFTIEGACNRTVFEvw1  
ERCLIPMLKPGQKLVI--DNATFHKAGRIQELVEKAG--CEWYLPPYSPDLNKIERS  
WSWIKSIR"  
/note="IS630 e-value= 1.2e-14 fragment hit coverage=  
59.57%, between model( 376 aa) positions 110; 333 length  
is 197aa with 30 gaps, 0 stops, absolute frame= Plus1"  
CDS 4227730..4228050  
/colour="255 0 0"  
/evidence=predicted  
/translation="FPDAQQVHVVLNDLNTHtpaalyKTFKPDEALRILS-RIOFHYT  
PKHGSQLNMVEFEFSALSROCLNRIP-DIEKLRHEVTAWEQRRNWDKAMVNWLFTVD  
DARTKLS"  
/note="IS630 e-value= 3.3e-07 fragment hit coverage=  
27.39%, between model( 376 aa) positions 274; 376 length  
is 107aa with 2 gaps, 0 stops, absolute frame= Plus1"  
CDS 5176546..5176935  
/colour="255 0 0"  
/evidence=predicted  
/translation="FFMDESGFSLVPCIPY-GWQPIG-----TYL-EIPT  
RSSKRLNVLGFLSRRQGL--HAYTSEQTITSEVVShCIDTFFADV--ELPTVIVVDQA  
PIHTSQsiyEMKAEWAERG--ITLFELPSYSPHLNLIERLWQFMKYQWI"  
/note="IS630 e-value= 6.5e-11 fragment hit coverage=  
39.10%, between model( 376 aa) positions 187; 333 length  
is 130aa with 21 gaps, 0 stops, absolute frame= Plus1"  
CDS 5240533..5240919  
/colour="255 0 0"  
/evidence=predicted  
/translation="YADESGMEHRDEYDY-AYGPKGE-----RAYA-LKSG-

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RRSGRVNMIAALRAKQL--MAPFTIEGACNRTVFEIWLercLIPMLKPGQKLVI--DN
ATFHKGQIQELVEAAG--CEVWYLPYSPDLNKIERSWSWIKSIR"
/note="IS630 e-value= 4e-14 fragment hit coverage=
38.83%, between model( 376 aa) positions 188; 333 length
is 129aa with 20 gaps, 0 stops, absolute frame= Plus1"
CDS 5297623..5297775
/colour="255 0 0"
/evidence=predicted
/translation="QLCLILDNNPTHKG-KMRSQLAIHLEqmgltqsiQVEFLYLPY
SPKLNVE"
/note="IS630 e-value= 4.3e-06 fragment hit coverage=
11.70%, between model( 376 aa) positions 279; 322 length
is 51aa with 1 gaps, 0 stops, absolute frame= Plus1"
CDS 5359111..5359329
/colour="255 0 0"
/evidence=predicted
/translation="RIRFYIIPKHTSWLNQIECWFSILVRRLIRRGNFTSKDDLQORI
LEFIEYFNhtMAKPFWQFKGFQPRXLXLM"
/note="IS630 e-value= 4e-10 fragment hit coverage=
19.15%, between model( 376 aa) positions 305; 376 length
is 73aa with 0 gaps, 1 stops, absolute frame= Plus1"
CDS 5359159..5359269
/colour="255 0 0"
/evidence=predicted
/translation="IECWFSILVRRLIR--RGNFTSKDDLQQRILEFIEYFNH"
/note="IS3_IS150_ORF2 e-value= 2e-08 fragment hit
coverage= 10.03%, between model( 389 aa) positions 329;
367 length is 37aa with 2 gaps, 0 stops, absolute frame=
Plus1"
CDS 5666503..5666847
/colour="255 0 0"
/evidence=predicted
/translation="CGNANIMXYLY-----RNIEKGEYMVELGgfrRYF
YELARHKESVIEEGHLMMPDHVKLLSIPPKYSVSNVVGYVKGKVPFISPESXA-----
-----IVGMRQAI-----SFGLEDILC-QOSAKMRKXSVDISG"
/note="IS605 e-value= 9.1e-06 complete sequence hit
coverage= 100%, between model( 152 aa) positions 1; 152
length is 115aa with 40 gaps, 3 stops, absolute frame=
Plus1"
CDS 5666590..5666721
/colour="255 0 0"
/evidence=predicted
/translation="FYELARHKESVIEEGHLMMPDHVKLLSIPPKYSVSNVVGYVKGK
"
/note="IS200 e-value= 1.3e-14 fragment hit coverage=
28.57%, between model( 154 aa) positions 41; 84 length is
44aa with 0 gaps, 0 stops, absolute frame= Plus1"
CDS 5666590..5666721
/colour="255 0 0"
/evidence=predicted
/translation="FYELARHKESVIEEGHLMMPDHVKLLSIPPKYSVSNVVGYVKGK
"
/note="IS200_IS605 e-value= 1.4e-14 fragment hit
coverage= 28.76%, between model( 153 aa) positions 41; 84
length is 44aa with 0 gaps, 0 stops, absolute frame=
Plus1"
CDS 5666629..5666721
/colour="255 0 0"
/evidence=predicted
/translation="EGHLMMPDHVKLLSIPPKYSVSNVVGYVKGK"

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/note="IS605 e-value= 2.2e-10 fragment hit coverage= 20.39%, between model( 152 aa) positions 54; 84 length is 31aa with 0 gaps, 0 stops, absolute frame= Plus1"

CDS 5747743..5747880  
/colour="255 0 0"  
/evidence=predicted  
/translation="WQTDGWEGYARQLPDE---VVHEVSKALTQRLERTNGIVRQQQTGRWHRR"  
/note="IS1\_ORF2 e-value= 1.8e-11 fragment hit coverage= 20.68%, between model( 237 aa) positions 164; 212 length is 46aa with 3 gaps, 0 stops, absolute frame= Plus1"

CDS 5903662..5904156  
/colour="255 0 0"  
/evidence=predicted  
/translation="LEKAGIESKKKTYGYR--ERD--ETQR---QEFIERLTKHA--HQIVYVDEAGIDNRADYPY-GYGPIG-----ORFYD-LKSG-KRTTERVSFIA ALKEGQL--FSPMTFEGSCNWLLFEAWLQQSLIPOLQPgdIIVI-DNASFHHGLSIEE IVAEAG--CEIWYLPSYSPDLNKIERWWFVLKN"  
/note="IS630 e-value= 4e-13 fragment hit coverage= 50.80%, between model( 376 aa) positions 140; 330 length is 165aa with 28 gaps, 0 stops, absolute frame= Plus1"

CDS 6055453..6056127  
/colour="255 0 0"  
/evidence=predicted  
/translation="SXGICMKCPECGGQH-IHKNGHRR-GKQNHICVTCTGRQFL--ST YSKRGYSDWTKRLCLRMVNGMGLKGIERVIGVAHTTVIHWVQQVGVLVDAYDPDD----IP---QVGELETFGKRNKVWIW-TVVDHFHPG--ILGWVVGDSAETF RPLWqaIVCWQCFFWVSDGNPVYpgFIPEGDQIVSKTYMTRVEGENTRLRHYLARLHR KTLCKYSKSVVMLKHSIRLL--IHYL"  
/note="IS1\_ORF1 e-value= 5.8e-42 complete sequence hit coverage= 100%, between model( 239 aa) positions 1; 239 length is 225aa with 19 gaps, 1 stops, absolute frame= Plus1"

CDS 6055453..6056127  
/colour="255 0 0"  
/evidence=predicted  
/translation="SXGICMKCPECGGQH-IHKNGHRR-GKQNHICVTCTGRQFL--ST YSKRGYSDWTKRLCLRMVNGMGLKGIERVIGVAHTTVIHWVQQVGVLVDAYDPDD----IP---QVGELETFGKRNKVWIW-TVVDHFHPG--ILGWVVGDSAETF RPLWqaIVCWQCFFWVSDGNPVYpgFIPEGDQIVSKTYMTRVEGENTRLRHYLARLHR KTLCKYSKSVVMLKHSIRLL--IHYL"  
/note="IS1\_ORF1 e-value= 3.3e-41 complete sequence hit coverage= 100%, between model( 239 aa) positions 1; 239 length is 225aa with 19 gaps, 1 stops, absolute frame= Plus1"

CDS 6055453..6056133  
/colour="255 0 0"  
/evidence=predicted  
/translation="SXGICMKCPECGGQH-IHKNGHRR-GKQNHICVTCTGR----QFL STYSKRGydsdWTKRLCLRMVNGMGLKGIERVIGVAHTTVIHWVQQV--GVLLPDAYD PDDIPQVGELETFGKRNKVWIW-TVVDHFHPGILGWVVGDSAETFRPLWQAIV CWQ-CFFWVSDGNPVYPFGIPEG---DQIVSKTYMTRVEGENTRLRHYLARLHR KTLCKYSKSVVMLKHSIRLLI-HYLKF"  
/note="IS1\_ORF2 e-value= 3.9e-29 complete sequence hit coverage= 100%, between model( 237 aa) positions 1; 237 length is 227aa with 14 gaps, 1 stops, absolute frame= Plus1"

CDS 6055732..6056133  
/colour="255 0 0"  
/evidence=predicted

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<translation="DPDDIPQVGELDELETFGKKRNKVWIWTVVDFHHPGILGWVVG
DHSAETFRPLWQAIVCWQ-CFFWVSDGNPVYPGFIPEG----DQIVSKTYMTRVEGEN
TRLRHYLARLHRKTLCCYSKSVDMLKHSIRLLI-HYLKF"
/note="IS1_ORF2 e-value= 8.3e-32 fragment hit coverage=
59.07%, between model( 237 aa) positions 98; 237 length
is 134aa with 6 gaps, 0 stops, absolute frame= Plus1"
CDS 6108877..6109140
/colour="255 0 0"
/evidence=predicted
/translation="LFYFLMQCPLCGHPK-THKGKTSKGSQRYRCPHCQQTFS-Etf
DTLCYRRQiSPETIQTILQAHVEGSSLRGLSRITGVAYNTCVSVVR"
/note="IS1_ORF1 e-value= 1.7e-15 fragment hit coverage=
36.40%, between model( 239 aa) positions 1; 87 length is
88aa with 2 gaps, 0 stops, absolute frame= Plus1"
CDS 6307891..6308655
/colour="255 0 0"
/evidence=predicted
/translation="SPYQHLSLYLKKRLSHMLTHWESIESQA-MQENWSYAEFLLAL
CETKAQRREQARLKRALTEARLPNA-KSFTNFDFSHCPQLNPAPLMQLAAdPGWLERA
ENCLILGPSVGKTHLATGVSKKMLEFGKRVKFFAANALVQHLOQAKLQLQLH-PMLK
KLDTRYDLLVLDDLGYCKKSEAETSVLFELIAHRYERKSLLITANQPFSQWDDIFT-DS
MMAVAIIDRLIHHLGLIIKIQADSYRRKSATQRTAQTOQSPPQ"
/note="IS21_ORF2 e-value= 7.2e-80 complete sequence hit
coverage= 100%, between model( 258 aa) positions 1; 258
length is 255aa with 4 gaps, 0 stops, absolute frame=
Plus1"
CDS 6307891..6308655
/colour="255 0 0"
/evidence=predicted
/translation="SPYQHLSLYLKKRLSHMLTHWESIESQA-MQENWSYAEFLLAL
CETKAQRREQARLKRALTEARLPNA-KSFTNFDFSHCPQLNPAPLMQLAAdPGWLERA
ENCLILGPSVGKTHLATGVSKKMLEFGKRVKFFAANALVQHLOQAKLQLQLH-PMLK
KLDTRYDLLVLDDLGYCKKSEAETSVLFELIAHRYERKSLLITANQPFSQWDDIFT-DS
MMAVAIIDRLIHHLGLIIKIQADSYRRKSATQRTAQTOQSPPQ"
/note="IS21_ORF2 e-value= 1.9e-80 complete sequence hit
coverage= 100%, between model( 258 aa) positions 1; 258
length is 255aa with 4 gaps, 0 stops, absolute frame=
Plus1"
CDS 6335869..6336906
/colour="255 0 0"
/evidence=predicted
/translation="PMIKIDFTAEEIQQLNYERYHHPHPRVQRRMEVLYLKSQGLSHT
QICOLCQISRPTLAQTLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH
PP-----RTSAAQAVIEQLTGIKRSPQIKAFLKRGCRYRKVGYVPGKSSLP
-EKIEEQEQRHTRLEPLeeAQRQERLVFFDAAHFVHRAYLGF-VWCITRI-----
-----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL
DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPYSPHLNLIERLWRFVRKE
CLYSKYADFPAFKGAIQOCIDQCNGEHKAKLTTLLSLKFQSFKK"
/note="IS630 e-value= 4.9e-24 complete sequence hit
coverage= 100%, between model( 376 aa) positions 1; 376
length is 346aa with 33 gaps, 0 stops, absolute frame=
Plus1"
CDS 6335869..6336906
/colour="255 0 0"
/evidence=predicted
/translation="PMIKIDFTAEEIQQLNYERYHHPHPRVQRRMEVLYLKSQGLSHT
QICOLCQISRPTLAQTLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH
PP-----RTSAAQAVIEQLTGIKRSPQIKAFLKRGCRYRKVGYVPGKSSLP
-EKIEEQEQRHTRLEPLeeAQRQERLVFFDAAHFVHRAYLGF-VWCITRI-----
-----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL
</pre>

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DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPHNLIERLWRFVRKE  
 CLYSKYADFPFKGAIQQCIDQCNGEHKAKLTLSSLKFQSFKK"  
 /note="IS630 e-value= 6.7e-25 complete sequence hit  
 coverage= 100%, between model( 376 aa) positions 1; 376  
 length is 346aa with 33 gaps, 0 stops, absolute frame=  
 Plus1"

CDS 6335929..6336087  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="HHPHPRVQRRMEVLYLKSQGLSHTQICQLCQISRPTLAKTLRQY  
 QQGGIEGLK"  
 /note="IS481 e-value= 3.7e-09 fragment hit coverage=  
 15.10%, between model( 351 aa) positions 1; 53 length is  
 53aa with 0 gaps, 0 stops, absolute frame= Plus1"

CDS 6483169..6483501  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="QRVKDRAAMIRLSHQGMYVEKIAALFQCNVRTARQTFHRWQQKG  
 ---LGGIWDAPHQGAQRRWHPEDEIYELETCLRQEERTY-----NSQQLSRKLAK  
 RNVHLSADRIRQILKKRGXS"  
 /note="IS630 e-value= 6e-07 fragment hit coverage=  
 32.45%, between model( 376 aa) positions 25; 146 length  
 is 111aa with 11 gaps, 1 stops, absolute frame= Plus1"

CDS 59159..60220  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="IVKRXKN-----EQCIVSHpYPALXPPQPLAQG---ISSA---  
 --RQXHFXESEQRQRXSENCSVRAASSRPIDAAIRDRKSLNVLTP--NQKRQMVRQL  
 QQDY SIRQICQVLNYPRSQVYYHARGQP----DESELKAAIAGVAGAYP-TYGYRRI  
 TAQLQ---RQGYCVNHKRVARLMRQIGIMAKTKVK-RKRTTNSEHSfpRYGNRVLNLS  
 --IDHPEQVWVADITYIRLQ-QEFVYLAVVMDVFTRAIRGWHLSRHIDQQLTLRALNK  
 ALERAT---PEIHHS----DQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAER  
 LMRTIKEEEVD--LSDYRNFTTEAYEHIEQFLEDvYMHKRIHSSLGYLTPCEYEQQWRO  
 Q"  
 /note="IS3\_IS150\_ORF2 e-value= 1.7e-22 complete sequence  
 hit coverage= 100%, between model( 389 aa) positions 1;  
 389 length is 354aa with 39 gaps, 5 stops, absolute  
 frame= Plus2"

CDS 59198..60244  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="HPYPALXPPQ--PLAQGI--SSARQXHFXESEQRQRXSENCSV  
 RAASSRPIDAAIRDRKKSlnVLTPNQKRQMVRQLQQDY--SIRQICQVLNYPRSQVYYH  
 ARGQPDESELKAAIAGVAGAYPTYGYRRITAQLQRQGYCVNHKRVARLMRQIGIMAKT  
 KV-KRKRTtnsehsfprYGNRVLNLSIDHPEQVWVADITYIRLQ--QEFVYLAVVmDV  
 FTRAIRGWHLSRHIDQQLTLRALNKALE-RATPEIHHSQGVQYAAAAYMQLLQQHQV  
 QISMAEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFTTEAYEHIEQFLEDvYMHKRIHS  
 SLGYLTPCEYEQQWROQNNHCMNK"  
 /note="IS3\_IS407\_ORF2 e-value= 6.3e-13 complete sequence  
 hit coverage= 100%, between model( 344 aa) positions 1;  
 344 length is 349aa with 10 gaps, 4 stops, absolute  
 frame= Plus2"

CDS 59333..60217  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="PIDAAIRDRKKSlnVLTPNQKRQMVRQLQQDY SIRQICQVLNYP  
 RSQVYYHARGQPDESELKAAIAGV-AGAYPTYGYRRITAQLQRQGYCVNHKRVARLMR  
 QIGIMAKTKVK---RKRTTNSEHSF-PRYGNRv1NLSIDHPEQVWVADITYIRL--Q  
 QEFVYLAVVMDVFTRAIRGWHLSRHIDQQLTLRALNKALER---ATPEIHHSQGVQ  
 YAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT--EAYE

HIEQFLEDVYMHKRIHSSLGYLTPCEYEQQWRQ"

/note="IS3\_IS150\_ORF1 e-value= 4.3e-49 complete sequence hit coverage= 100%, between model( 306 aa) positions 1; 306 length is 295aa with 14 gaps, 0 stops, absolute frame= Plus2"

CDS 59369..60253

/colour="255 0 0"

/evidence=predicted

/translation="LNVLTPNQKRQMVRQLQQD-YSIROICQVLNYPRSQVYYHARGQPD-----ESELKAAIAGVAGAYPTYGYRRITAQLQRQGTYC-VNHKRVARLMRQIGIMAKTKVKRKRTTNSEHSFPRYGNRLNLSIDHPEQVWVADITYI-----RLQO-----EFVYLA VVMDVFTRAIRGWHLSRH----IDQQLTLRALNKALERAT-PEIHSDQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIKEEEVDLSD---YRNFT EAYEHIEQFLEDVYMHKRIHSSLGYLTPCEYEQQWRQQNNHYCMNKEDS"

/note="IS481 e-value= 2.9e-08 complete sequence hit coverage= 100%, between model( 351 aa) positions 1; 351 length is 295aa with 58 gaps, 0 stops, absolute frame= Plus2"

CDS 59369..60253

/colour="255 0 0"

/evidence=predicted

/translation="LNVLTPNQKRQMVRQLQQDYSIROICQVLNYPRSQVYYHARGQRgQPDESELKA--AIAGV-----AGA---YPTYGYRRITAQLQRQGTYC-VNHKRVARLMRQIGIMAKTKVKRKRTTNSEHSFPRYGNRLNLSIDHPEQVWVADITYI-----IHHSDQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIKEEEVDLSDYrnFT EAYEHIEQFLEDV--YMHKRIHSSLGYLTPCEYEQQWRQQNNHYCMNKEDS"

/note="IS3\_IS51\_ORF2 e-value= 1.6e-26 complete sequence hit coverage= 100%, between model( 317 aa) positions 1; 317 length is 295aa with 27 gaps, 0 stops, absolute frame= Plus2"

CDS 59375..59629

/colour="255 0 0"

/evidence=predicted

/translation="VLTPNQKRQMVRQLQQDYSIROICQVLNYPRSQVYYHARGQPD-----ESELKAAIAGVAGAYPTYGYRRITAQLQRQGTYC-VNHKRVARLMRQIGIM--AKTKVKRK-RttnsehsfpRYGNRLNLSIDHPEQVWVAD-ITYI-----FVYLA VVMDVFTRAIRGWH----LSRHIDQQLTLRALNK---ALERATPEIHH-SDQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT EAYEHIEQFLEDVYMHKRIHSSLGYLTPCEYEQQWRQQNNH"

/note="IS3\_IS407\_ORF2 e-value= 1.2e-17 fragment hit coverage= 25.29%, between model( 344 aa) positions 60; 146 length is 85aa with 2 gaps, 0 stops, absolute frame= Plus2"

CDS 59378..60229

/colour="255 0 0"

/evidence=predicted

/translation="LTPNQKRQMVRQL-QQDYSIROICQVLNYPRSQVYYHARG-----QDYSIROICQVLNYPRSQVYYHARG-----CVNHKRVARLMRQIGIM--AKTKVKRK-RttnsehsfpRYGNRLNLSIDHPEQVWVAD-ITYI-----FVYLA VVMDVFTRAIRGWH----LSRHIDQQLTLRALNK---ALERATPEIHH-SDQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT EAYEHIEQFLEDVYMHKRIHSSLGYLTPCEYEQQWRQQNNH"

/note="IS3\_IS2\_ORF2 e-value= 2.2e-08 complete sequence hit coverage= 100%, between model( 302 aa) positions 1; 302 length is 284aa with 31 gaps, 0 stops, absolute frame= Plus2"

CDS 59393..60220

/colour="255 0 0"

/evidence=predicted

/translation="KRQMVRQLQQDYSIROICQVLNYPRSQVYYHARGQPD-----DES ELKAAIAGVAGAYP-TYGYRRITAQLQ---RQGTYC-VNHKRVARLMRQIGIMAKTKVK-RKRTTNSEHSfpRYGNRLNLS--IDHPEQVWVADITYI-----QEFVYLA VVMDVFTR

AIRGWHLRHDQQLTLRALNKALERAT---PEIHHS-----DQGVQYAAAAYMQLLO  
 HQVQISMAEVGQAWQNGYAERLMRTIKEEEVD--LSDYRNFTTEAYEHIEQFLEDVYM  
 HKRIHSSLGYLTPCEYEQQWRQQ"  
 /note="IS3\_IS150\_ORF2 e-value= 2.2e-47 fragment hit  
 coverage= 76.09%, between model( 389 aa) positions 94;  
 389 length is 276aa with 23 gaps, 0 stops, absolute  
 frame= Plus2"  
 CDS 59396..60244  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="RQMVRQLQQDYSIROICQVLNYPRSQVYYHA-----RG  
 QPDESELKAAIAGV-AGAYPTYGYRRITAQLQRQGYCVNHKRVARLMRQIGIMAKTKV  
 KRKRTTNSEHSFPRYGNRVL-NLSIDHPEQVWVADITYIRLQQEFVYLA VVMDVFTRA  
 IRGWHLRHDQQLT-LRALNKALERATPE-----IHHSDQGVQYAAAAYMQLLQQ  
 HQVQISMAEVGQAWQNGYAERLMRTIKEEEVDL---S-DYRNFTTEAYEHIEQFLEDVY  
 MHKRIHSSLGYLTPCEYEQQWRQQNNHYCMNK"  
 /note="IS3\_IS51\_ORF1 e-value= 8.1e-53 complete sequence  
 hit coverage= 100%, between model( 307 aa) positions 1;  
 307 length is 283aa with 25 gaps, 0 stops, absolute  
 frame= Plus2"  
 CDS 59396..60244  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="RQMVRQLQQDYSIROICQVLNYPRSQVYYHA-----RG  
 QPDESELKAAIAGV-AGAYPTYGYRRITAQLQRQGYCVNHKRVARLMRQIGIMAKTKV  
 KRKRTTNSEHSFPRYGNRVL-NLSIDHPEQVWVADITYIRLQQEFVYLA VVMDVFTRA  
 IRGWHLRHDQQLT-LRALNKALERATPE-----IHHSDQGVQYAAAAYMQLLQQ  
 HQVQISMAEVGQAWQNGYAERLMRTIKEEEVDL---S-DYRNFTTEAYEHIEQFLEDVY  
 MHKRIHSSLGYLTPCEYEQQWRQQNNHYCMNK"  
 /note="IS3\_IS51\_ORF1 e-value= 6.3e-51 complete sequence  
 hit coverage= 100%, between model( 307 aa) positions 1;  
 307 length is 283aa with 25 gaps, 0 stops, absolute  
 frame= Plus2"  
 CDS 59399..60214  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="QMVRLQQDYSIROICQVLNYPRSQVYYHARG--QPD----ES  
 ELKAAI-AGVAGAYPTYGYRRITAQLQ-RQGYCVNHKRVARLMRQIGIMAKTKVKRK  
 TTNSEHSfPRYGNRVLNLS-IDHPEQVWVADITYIRLQQEFVYLA VVMDVFTRAIRGW  
 HLSRHIDQQLTLRALNKALERA-TPE--IHHSDQGVQYAAAAYMQLLQQHQVQISMAE  
 VGQAWQNGYAERLMRTIK-EEEVDL-SDYRNFTTEAYEHIEQFLEDVYMHKRIHSSLGY  
 LTPCEYEQQWR"  
 /note="IS3\_IS3\_ORF1 e-value= 9.5e-54 complete sequence  
 hit coverage= 100%, between model( 286 aa) positions 1;  
 286 length is 272aa with 15 gaps, 0 stops, absolute  
 frame= Plus2"  
 CDS 59399..60214  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="QMVRLQQDYSIROICQVLNYPRSQVYYHARG--QPD----ES  
 ELKAAI-AGVAGAYPTYGYRRITAQLQ-RQGYCVNHKRVARLMRQIGIMAKTKVKRK  
 TTNSEHSfPRYGNRVLNLS-IDHPEQVWVADITYIRLQQEFVYLA VVMDVFTRAIRGW  
 HLSRHIDQQLTLRALNKALERA-TPE--IHHSDQGVQYAAAAYMQLLQQHQVQISMAE  
 VGQAWQNGYAERLMRTIK-EEEVDL-SDYRNFTTEAYEHIEQFLEDVYMHKRIHSSLGY  
 LTPCEYEQQWR"  
 /note="IS3\_IS3\_ORF1 e-value= 2.5e-54 complete sequence  
 hit coverage= 100%, between model( 286 aa) positions 1;  
 286 length is 272aa with 15 gaps, 0 stops, absolute  
 frame= Plus2"  
 CDS 59402..60217

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/colour="255 0 0"
/evidence=predicted
/translation="MVRQLQODYSIROICQVLNYPRSQVYYHARGQPDESELKAAIAG
V-AGAYPTYGYRRITAQLQRQGCVNHKRVARLMRQIGIMAKTKVK----RKRTTNSE
HSF-PRYGNRv1NLSIDHPEQVWVADITYIRL--QQEFVYLA VVMDVFTRAIRGWHL
RHIDQQLTLRALNKALER---ATPEIHSDQGVQYAAAAYMQLLQQHQVQISMAEVG
QAWQNGYAERLMRTIKEEEVDLSDYRNFT--EAYEHIEQFLEDVYMHKRIHSSLGYLT
PCEYEQQWRQ"
/note="IS3_IS150_ORF1      e-value= 6.3e-50 fragment hit
coverage= 92.81%, between model( 306 aa) positions 23;
306 length is 272aa with 14 gaps, 0 stops, absolute
frame= Plus2"
CDS
59411..60226
/colour="255 0 0"
/evidence=predicted
/translation="QLQQDYSIROICQVLNYPRSQVYYHARGQPDE-----SEL
KAAIAGVAGayptTYGYRRITAQLQRQGCVNHKRVARLMRQIGIMAKTKVKRKRTTNS
EHSFPRY---GNRVLNLSIDHPEQVWVADITYIRLQQEFVYLA VVMDVFTRAIRGWHL
SRHIDQQLTLRALNKALER---ATPE---IHHSQGVQYAAAAYMQLLQQHQVQISMS
AEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT EAYEHIEQFLEDVYMHKRIHSSLGY
LTPCEYEQQWRQQNN"
/note="IS3_IS3_ORF2      e-value= 1.2e-64 complete sequence
hit coverage= 100%, between model( 288 aa) positions 1;
288 length is 272aa with 19 gaps, 0 stops, absolute
frame= Plus2"
CDS
59411..60226
/colour="255 0 0"
/evidence=predicted
/translation="QLQQDYSIROICQVLNYPRSQVYYHARGQPDE-----SEL
KAAIAGVAGayptTYGYRRITAQLQRQGCVNHKRVARLMRQIGIMAKTKVKRKRTTNS
EHSFPRY---GNRVLNLSIDHPEQVWVADITYIRLQQEFVYLA VVMDVFTRAIRGWHL
SRHIDQQLTLRALNKALER---ATPE---IHHSQGVQYAAAAYMQLLQQHQVQISMS
AEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT EAYEHIEQFLEDVYMHKRIHSSLGY
LTPCEYEQQWRQQNN"
/note="IS3_IS3_ORF2      e-value= 3.3e-65 complete sequence
hit coverage= 100%, between model( 288 aa) positions 1;
288 length is 272aa with 19 gaps, 0 stops, absolute
frame= Plus2"
CDS
59480..59638
/colour="255 0 0"
/evidence=predicted
/translation="YHArgQPDESELKAAIAGVAGAYPTYGYRRITAQLQRQGY---
-CVNHKRVARLMRQ"
/note="IS3_IS2_ORF2      e-value= 9.1e-09 fragment hit
coverage= 18.87%, between model( 302 aa) positions 48;
104 length is 53aa with 5 gaps, 0 stops, absolute frame=
Plus2"
CDS
59546..60229
/colour="255 0 0"
/evidence=predicted
/translation="YPTYGYRRITAQLQRQGCVNHKRVARLMRQIGIMAKTKVKRK
TTNSEHSFPRYGNRVL-NLSIDHPEQVWVADITYIRLQQEFVYLA VVMDVFTRAIRGW
HLSRHIDQQLTLRALNKALERATPE-----IHHSQGVQYAAAAYMQLLQQHQVQ
ISMAEVGQAWQNGYAERLMRTIKEEEVDLSDYrnFT EAYEHIEQFLEDV--YMHKRIH
SSLGYLTPCEYEQQWRQNNH"
/note="IS3_IS51_ORF2      e-value= 1.9e-38 fragment hit
coverage= 74.76%, between model( 317 aa) positions 73;
309 length is 228aa with 11 gaps, 0 stops, absolute
frame= Plus2"
CDS
86624..87475

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/colour="255 0 0"
/evidence=predicted
/translation="TQTLDRXTXRAM-----PTAYDSDLTTLQWELLEPLIPIAAK-----
---PGGRPRTTDMLSVLNAIFYLVVTGCQWRQLPHDFPCWSTVYSYFRRWRDDGTWVH
INEHLMQERVSEDRHPSPSAAICDAQSVDGNPRCH-SIGFDGGKMKVGRKRHVLDV
TLGLVLMVMVTAANISDQR-GAKILFWKARRQGas1SRLVRIWADAGYQGQALMKWVM
DRFQYVLEVVKRSNDLAFQVVSKRWIVERTFGWLLWSRRLNKDYEVLTAEALAYV
AMIRLMVRRLAQEHNFSNSLS"
/note="IS5_IS1031 e-value= 1.9e-108 complete sequence hit
coverage= 100%, between model( 295 aa) positions 1; 295
length is 284aa with 14 gaps, 2 stops, absolute frame=
Plus2"
CDS
86666..87475
/colour="255 0 0"
/evidence=predicted
/translation="YDSDLTTLQWELLEPLIPIAAK-----PGGRPRTTDMLSVLNA
IFYLVVTGCQWRQLPHDFPCWSTVYSYFRRWRDDGTWVHINEHLMQERVSEDRHPSP
SAAICDAQSVDGNPRCH-SIGFDGGKMKVGRKRHVLDLGLVLMVMVTAANISDQR
-GAKILFWKARRQGas1SRLVRIWADAGYQGQALMKWVMDRFQYVLEVVKRSNDLAF
QVVSKRWIVERTFGWLLWSRRLNKDYEVLTAEALAYVAMIRLMVRRLAQEHNFSN
SLS"
/note="IS5_IS1031 e-value= 1.3e-110 fragment hit
coverage= 93.56%, between model( 295 aa) positions 20;
295 length is 270aa with 9 gaps, 1 stops, absolute frame=
Plus2"
CDS
86675..86914
/colour="255 0 0"
/evidence=predicted
/translation="DLTTLQWELLEPLIPIAAKP-GGRPRT-TDMLSVLNAIFYLVVTG
CQWRQLPHDFPCWSTVYSYFRRWRDDGTWVHINEHLM"
/note="IS5_IS427 e-value= 3.3e-18 fragment hit coverage=
27.70%, between model( 296 aa) positions 125; 206 length
is 80aa with 2 gaps, 0 stops, absolute frame= Plus2"
CDS
104411..105622
/colour="255 0 0"
/evidence=predicted
/translation="DELIGENPQPediLGESGLLKRLSKRLVERALAGELTHHLOQSS
NDQS-GDeNSNGPRNSRNNGYSKKTVQSEQG-EMDLSIPRDRCG-EFEPVLVPKGQRRI
A-GLDEKIIALYARGMTTRDIRAQLVELYG--ANISEALISDVTNSVMEEVKDWRSRP
LDEV--YPIVYLDALYVNIKVNGQVSKRAVYVALAVTVEGNKELLGLWIGAAerEGAK
FWLSVLTDLKNRGTQDILIAACCDGLKGFPQAIQESVYPQTVQVCIVHLIRNSLRHVPW
KESRAVAADLKPIYQAATLE-ESEAALDAFAH-KWDETYPGISQIWIRHWDNVAPLFO
YPMAIRKVIYTTNAIESLNRSLRKVIKTKAVFPNEESVYKLMFLAMRNISKR-WTRPI
LNWKAALSHFAILFPTRFNYXIH"
/note="IS256 e-value= 1.4e-166 complete sequence hit
coverage= 100%, between model( 410 aa) positions 1; 410
length is 404aa with 11 gaps, 1 stops, absolute frame=
Plus2"
CDS
104411..105622
/colour="255 0 0"
/evidence=predicted
/translation="DELIGENPQPediLGESGLLKRLSKRLVERALAGELTHHLOQSS
NDQS-GDeNSNGPRNSRNNGYSKKTVQSEQG-EMDLSIPRDRCG-EFEPVLVPKGQRRI
A-GLDEKIIALYARGMTTRDIRAQLVELYG--ANISEALISDVTNSVMEEVKDWRSRP
LDEV--YPIVYLDALYVNIKVNGQVSKRAVYVALAVTVEGNKELLGLWIGAAerEGAK
FWLSVLTDLKNRGTQDILIAACCDGLKGFPQAIQESVYPQTVQVCIVHLIRNSLRHVPW
KESRAVAADLKPIYQAATLE-ESEAALDAFAH-KWDETYPGISQIWIRHWDNVAPLFO
YPMAIRKVIYTTNAIESLNRSLRKVIKTKAVFPNEESVYKLMFLAMRNISKR-WTRPI
LNWKAALSHFAILFPTRFNYXIH"
/note="IS256 e-value= 3.7e-167 complete sequence hit

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coverage= 100%, between model( 410 aa) positions 1; 410  
 length is 404aa with 11 gaps, 1 stops, absolute frame=  
 Plus2"

CDS 159026..160063  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="PMIKIDFTAEEIQQLNYERYHHPPRVQRRMEVLYLKSQGLSHT  
 QICQLCQISRPTLAKTLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH  
 PP-----RTSAEAQAVIEQLTGIKRSPTQIKAFLKRIGCRYRKVGYVPKGSSL  
 -EKIEEQEQRHTRLEPLeeAQRQERLVFFFDAAHFVHRAYLGF-VWCITRI----  
 -----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL  
 DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPHLNLIERLWRFVRKE  
 CLYSKYADFPFKGAIQQCIDQNCNGEHKAKLTTLLSLKFQSFKK"  
 /note="IS630 e-value= 6.7e-25 complete sequence hit  
 coverage= 100%, between model( 376 aa) positions 1; 376  
 length is 346aa with 33 gaps, 0 stops, absolute frame=  
 Plus2"

CDS 159026..160063  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="PMIKIDFTAEEIQQLNYERYHHPPRVQRRMEVLYLKSQGLSHT  
 QICQLCQISRPTLAKTLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH  
 PP-----RTSAEAQAVIEQLTGIKRSPTQIKAFLKRIGCRYRKVGYVPKGSSL  
 -EKIEEQEQRHTRLEPLeeAQRQERLVFFFDAAHFVHRAYLGF-VWCITRI----  
 -----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL  
 DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPHLNLIERLWRFVRKE  
 CLYSKYADFPFKGAIQQCIDQNCNGEHKAKLTTLLSLKFQSFKK"  
 /note="IS630 e-value= 4.9e-24 complete sequence hit  
 coverage= 100%, between model( 376 aa) positions 1; 376  
 length is 346aa with 33 gaps, 0 stops, absolute frame=  
 Plus2"

CDS 159086..159244  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="HHPPRVQRRMEVLYLKSQGLSHTQICQLCQISRPTLAKTLRQY  
 QQGGIEGLK"  
 /note="IS481 e-value= 3.7e-09 fragment hit coverage=  
 15.10%, between model( 351 aa) positions 1; 53 length is  
 53aa with 0 gaps, 0 stops, absolute frame= Plus2"

CDS 249134..249991  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="CRISDRNLRAM-----STAYSDLTAEQWELLEPLIPIAAK----  
 ---PGGRPRTTDMLSVVNAIFYLVVTGCQWRQLPHDFHCWSTVSYFRKWRDDGTWRQ  
 INEHLRMQVRVSEDRHPSPSAAICDAQSVKVNPRCQ-SIGFDGGKLIKGRKRHVLD  
 TLGLLILMVVVTAANISDQR-GAKILFWKARRQGAslgRLVRIWADAGYQGEALMQWVM  
 DRFRYILEVIKRSDNLAGFKVVPKRWIVERTFGWLLWSRRLNKDYEVLTRTAEALVYV  
 AMIRLMVRRLAQEyxFQTASKMW"  
 /note="IS5\_IS1031 e-value= 6.8e-110 complete sequence hit  
 coverage= 100%, between model( 295 aa) positions 1; 295  
 length is 286aa with 14 gaps, 0 stops, absolute frame=  
 Plus2"

CDS 249164..249424  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="MSTAYSDLTAEQWELLEPLIPIAAKP-GGRPRT-TDMMSVVNAI  
 FYLVVTGCQWRQLPHDFHCWSTVSYFRKWRDDGTWRQINEHLRM"  
 /note="IS5\_IS427 e-value= 1e-22 fragment hit coverage=  
 30.07%, between model( 296 aa) positions 118; 206 length  
 is 87aa with 2 gaps, 0 stops, absolute frame= Plus2"

CDS 249176..249991  
/colour="255 0 0"  
/evidence=predicted  
/translation="YDSDLTAEQWELLEPLIPIAK-----PGGRPRTTDMLSVN  
IFYLVVTGCQWRQLPHDFHCWSTVSYFRKWRDDGTWRQINEHLMQVRVSEDRHPSP  
SAAICDAQS VKG VGN PRC Q-SIGFDGGKLIKGRKRHV LVD TLGL LILM VVV TAAN IS DQR  
-GAKILFWKARRQGas1gRLVRIWADAGYQGEALMQWVMDRFRYILEVIKRSNDNLAGF  
KVVPKR WIVERTFGWLLWSRRLNKDYEVLTRTAEALVYVAMIRLMVRRLAQEyxTFQT  
ASKMW"  
/note="IS5\_IS1031 e-value= 1.4e-111 fragment hit  
coverage= 93.56%, between model( 295 aa) positions 20;  
295 length is 272aa with 9 gaps, 0 stops, absolute frame=  
Plus2"

CDS 440219..441070  
/colour="255 0 0"  
/evidence=predicted  
/translation="TQTLDR TXRAM-----PTAYDSDL TTLQWELLEPLIPIAK----  
---PGGRPRTTDMLSVLNA IFYLVVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWSQ  
INEHLMQVRVSEDRHPSP SAAICDAQS VKG VGN PRC H-LIGFDGGKMKVGRKRHV LVD  
TLGL LVM VMV TAAN IS DQR-GAKILFWKARRQGas1SRLVRIWADAGYQGQALMKWVM  
DRSQYVLEVIKRSNDNLAGFQVVS KR WIVERTFGWLLWSRRLNKDYEVLTRTAEALVYV  
AMIRLMVRRLAQEHXNFNSNLS"  
/note="IS5\_IS1031 e-value= 2.3e-109 complete sequence hit  
coverage= 100%, between model( 295 aa) positions 1; 295  
length is 284aa with 14 gaps, 2 stops, absolute frame=  
Plus2"

CDS 440261..441070  
/colour="255 0 0"  
/evidence=predicted  
/translation="YDSDL TTLQWELLEPLIPIAK-----PGGRPRTTDMLSVLNA  
IFYLVVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWSQINEHLMQVRVSEDRHPSP  
SAAICDAQS VKG VGN PRC H-LIGFDGGKMKVGRKRHV LVD TLGL LVM VMV TAAN IS DQR  
-GAKILFWKARRQGas1SRLVRIWADAGYQGQALMKWVM DR SQYVLEVIKRSNDNLAGF  
QVVS KR WIVERTFGWLLWSRRLNKDYEVLTRTAEALVYVAMIRLMVRRLAQEHXNFNSN  
SLS"  
/note="IS5\_IS1031 e-value= 1.5e-111 fragment hit  
coverage= 93.56%, between model( 295 aa) positions 20;  
295 length is 270aa with 9 gaps, 1 stops, absolute frame=  
Plus2"

CDS 440270..440509  
/colour="255 0 0"  
/evidence=predicted  
/translation="DL TTLQWELLEPLIPIAKP-GGRPRT-TDMLSVLNA IFYLVVTG  
CQWRQLPHDFPCWSTVSYFRRWRDDGTWSQINEHLM"  
/note="IS5\_IS427 e-value= 2e-19 fragment hit coverage= 27.70%, between model( 296 aa) positions 125; 206 length is 80aa with 2 gaps, 0 stops, absolute frame= Plus2"

CDS 720377..721051  
/colour="255 0 0"  
/evidence=predicted  
/translation="SXGICMKCPEC GGQH-IHKNGHRR-GKQNHICVTCGRQFL--ST  
YSKRGYSDWT KRL CLR MYV NGM GLKG IER VIG VAH TT VIHWV QO VGV LL PDAY DP DD--  
IP---QVG ELD E T FVG KKR NKV WIW-TVVDHF HPG--ILGWV VGN HSAET F  
RPLWq a IVCWQCFFWVSDGNPVY pgFIPEgDQIVSKTYMTRVEGENTRLRH YLARLHR  
KTLCYSKS VDMLKHSIR LL--IH YL"  
/note="IS1\_ORF1 e-value= 4e-41 complete sequence hit  
coverage= 100%, between model( 239 aa) positions 1; 239  
length is 225aa with 19 gaps, 1 stops, absolute frame=  
Plus2"

CDS 720377..721051

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/colour="255 0 0"
/evidence=predicted
/translation="SXGICMKCPECGGQH-IHKNGHRR-GKQNHICVTCGRQFL--ST
YSKRGYSDWTKRLCLRMYVNGMGLKGIERVIGVAHTTVIHWVQQVGVLVDAYDPDD-
----IP---QVGELDELETFGKKRKNVWIW-TVVDHFHPG--ILGWVVGNHSAETF
RPLWqaIVCWQCFFWVSDGNPVYpgFIPEGDQIVSKTYMTRVEGENTRLRHYLARLHR
KTLCKSYKSVDMLKHSIRLL---IHYL"
/note="IS1_ORF1      e-value= 2.4e-40 complete sequence hit
coverage= 100%, between model( 239 aa) positions 1; 239
length is 225aa with 19 gaps, 1 stops, absolute frame=
Plus2"
CDS
720377..721057
/colour="255 0 0"
/evidence=predicted
/translation="SXGICMKCPECGGQH-IHKNGHRR-GKQNHICVTCGR----QFL
STYSKRGySdWTKRLCLRMYVNGMGLKGIERVIGVAHTTVIHWVQQV--GVLLPDAYD
PDDIPQVGELDELETFGKKRKNVWIWTVDHFHPGILGWVVGNSAETFRPLWQAIV
CWQ-CFFWVSDGNPVYPGFIPEG---DQIVSKTYMTRVEGENTRLRHYLARLHRKTL
CYSKSYKSVDMLKHSIRLLI-HYLKF"
/note="IS1_ORF2      e-value= 1.5e-28 complete sequence hit
coverage= 100%, between model( 237 aa) positions 1; 237
length is 227aa with 14 gaps, 1 stops, absolute frame=
Plus2"
CDS
720656..721057
/colour="255 0 0"
/evidence=predicted
/translation="DPDDIPQVGELDELETFGKKRKNVWIWTVDHFHPGILGWVVG
NHSAETFRPLWQAIVCWQ-CFFWVSDGNPVYPGFIPEG---DQIVSKTYMTRVEGEN
TRLRHYLARLHRKTLCKSYKSVDMLKHSIRLLI-HYLKF"
/note="IS1_ORF2      e-value= 3e-31 fragment hit coverage=
59.07%, between model( 237 aa) positions 98; 237 length
is 134aa with 6 gaps, 0 stops, absolute frame= Plus2"
CDS
748838..749635
/colour="255 0 0"
/evidence=predicted
/translation="IRVSCVVAQGDGSTALQAIHQAFGLEGx1fGCKLHPPLYCKKEN
DLVIKRGRHSRICIWIXVRTAVVLT-QKQWXTHSDYTLSAVTSKRLFEK-----XV
KLSRYXsVNTQTLDRTXRAMPTAYDSLTTLQWELLEPLI PAAKP-GGRPRT-TDMLS
VLNAIFYLVVTGCQWRQLPHDFPCWSTVYSYFRRWRDDGTWSQINEHLMQVRVSE--
-----DRHPSPSAAICDAQSVkvgnpRCHLIGFDGG
KMKVKGRKRHVLDLGLVLMVMVTAANIS"
/note="IS5_IS427      e-value= 2.8e-07 complete sequence hit
coverage= 100%, between model( 296 aa) positions 1; 296
length is 266aa with 39 gaps, 5 stops, absolute frame=
Plus2"
CDS
749108..749977
/colour="255 0 0"
/evidence=predicted
/translation="EKXVKLSRYXSVNTQTLDRTXramptaYDSDLTTLQWELLEPLI
PAAKPG-----GRPRTTDML-----SVLNAIFYLVVTGCQWRQ
--LPHDFPCWSTVYSYFRRWRDDGTWSQINEHLMQVRVSED---RHPSPSAAICDAQ
SVK-----VGNpRchLIGFD-----GGKM-
-----VKGRKRHVLD-TL
GLVLMVMVTAANISDQRGAK-----ILFWKAQRQGASLSRL
VR----IWADAGYQGQALMKWVMDRFQYVLEVVKRSNDNLAGFQVIPKRWIVERTFGWL
LWSRRLNKDYEVLTRTAEALVYVAMIRLMVRRLAQEHX"
/note="IS5_IS5      e-value= 1.8e-09 complete sequence hit
coverage= 100%, between model( 422 aa) positions 1; 422
length is 290aa with 140 gaps, 4 stops, absolute frame=
Plus2"

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CDS 749147..749998  
/colour="255 0 0"  
/evidence=predicted  
/translation="TQTLDRXTXRAM----PTAYDSDLTTLQWELLEPLIPIAAK----  
---PGGRPRTTDMLSVLNAIFYLVVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWSQ  
INEHLRMQVRVSEDRHPSPSAAICDAQSVKVGNNPRCH-LIGFDGGKMKVGRKRHVLVD  
TLGLVLMVMVTAANISDQR-GAKILFWKAQRQGas1SRLVRIWADAGYQGQALMKWVM  
DRFQYVLEVVKRSNDNLAGFQVIPKRWIVERTFGWLLWSRRLNKDYEVLTRTAEALVYV  
AMIRLMVRRLAQEHXNFNSNLX"  
/note="IS5\_IS1031 e-value= 1.8e-111 complete sequence hit  
coverage= 100%, between model( 295 aa) positions 1; 295  
length is 284aa with 14 gaps, 3 stops, absolute frame=  
Plus2"

CDS 749189..749998  
/colour="255 0 0"  
/evidence=predicted  
/translation="YDSDLTTLQWELLEPLIPIAAK-----PGGRPRTTDMLSVLNA  
IFYLVVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWSQINEHLRMQVRVSEDRHPSP  
SAAICDAQSVKVGNNPRCH-LIGFDGGKMKVGRKRHVLVDTGLVLMVMVTAANISDQR  
-GAKILFWKAQRQGas1SRLVRIWADAGYQGQALMKWVMDRFQYVLEVVKRSNDNLAGF  
QVIPKRWIVERTFGWLLWSRRLNKDYEVLTRTAEALVYVAMIRLMVRRLAQEHXNFNS  
SLX"  
/note="IS5\_IS1031 e-value= 1.2e-113 fragment hit  
coverage= 93.56%, between model( 295 aa) positions 20;  
295 length is 270aa with 9 gaps, 2 stops, absolute frame=  
Plus2"

CDS 749198..749437  
/colour="255 0 0"  
/evidence=predicted  
/translation="DLTTLQWELLEPLIPIAAKP-GGRPRT-TDMLSVLNAIFYLVVTG  
CQWRQLPHDFPCWSTVSYFRRWRDDGTWSQINEHLRM"  
/note="IS5\_IS427 e-value= 2e-19 fragment hit coverage=  
27.70%, between model( 296 aa) positions 125; 206 length  
is 80aa with 2 gaps, 0 stops, absolute frame= Plus2"

CDS 791804..792046  
/colour="255 0 0"  
/evidence=predicted  
/translation="VKLAELIPWESFESEYADQFSQ---TMGAPAKPFRVALGTLIIK  
EKLGISDAETVEQIRENPYLQYFLGFSEYRESAPFDASML"  
/note="IS5\_IS5 e-value= 2.6e-06 fragment hit coverage=  
19.91%, between model( 422 aa) positions 23; 106 length  
is 81aa with 3 gaps, 0 stops, absolute frame= Plus2"

CDS 940328..941023  
/colour="255 0 0"  
/evidence=predicted  
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS  
hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR  
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK  
PQIAAGMIQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
AEQAVFAEPWQSFERTFSNGTTETRYrQEIIYGqrhhQKRY"  
/note="IS4 e-value= 4.7e-14 fragment hit coverage=  
51.23%, between model( 486 aa) positions 1; 249 length is  
232aa with 27 gaps, 0 stops, absolute frame= Plus2"

CDS 940328..941455  
/colour="255 0 0"  
/evidence=predicted  
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS  
hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR  
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK  
PQIAAGMIQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP

AEQAVFAEPWQSFERTFSNGT-----TTRYR  
 QEIIYQRHHQKRyWLLTDPQTLPENSTS-----YVMAA  
 APE----IKLDEIGDCYGFRTWIEYGLKOSKD-TLGWADFRMTHYEQIEKWWEIVMSA  
 FLMVSLFADVFNDS-----CPVAHQHFAQHPwWDNQNG  
 WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"  
 /note="IS4 e-value= 9.9e-07 complete sequence hit  
 coverage= 100%, between model( 486 aa) positions 1; 486  
 length is 376aa with 117 gaps, 0 stops, absolute frame=  
 Plus2"

CDS 942041..942427  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="YADESGMDHRDEYDY-AYGPKGE-----RVYA-LKTG-  
 RRSGRVNMIAALRAKQL--MAPFTIEGACNRTVFEWLERCLIPv1KPGQKLVI--DN  
 ATFHKGQQIQLVEKAG--CEVWYLPPYSPDLNKIERSWSWIKSRIR"  
 /note="IS630 e-value= 1.1e-13 fragment hit coverage=  
 38.83%, between model( 376 aa) positions 188; 333 length  
 is 129aa with 20 gaps, 0 stops, absolute frame= Plus2"

CDS 1009808..1010014  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="IKANILKGQLIQADETPIKMVK---RE--TGYVVVFETTD----  
 -----AVLYFFKSTRKAFFLKELLKDFTGVVLISDFYAGY"  
 /note="IS66\_ORF2 e-value= 1e-08 fragment hit coverage=  
 16.26%, between model( 535 aa) positions 243; 329 length  
 is 69aa with 18 gaps, 0 stops, absolute frame= Plus2"

CDS 1009844..1010014  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="ADETPIKMV----KRETGYVVVFETTD-----AVLYFFK  
 STRKAFFLKELLKDFTGVVLISDFYAGY"  
 /note="IS66\_ORF3 e-value= 3.6e-07 fragment hit coverage=  
 12.72%, between model( 558 aa) positions 287; 357 length  
 is 57aa with 14 gaps, 0 stops, absolute frame= Plus2"

CDS 1313054..1314091  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="PMIKIDFTAEEIQQLNYERYHHPHPRVQRRMEVLYLKSQGLSHT  
 QICQLCQISRPTLAKEQLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH  
 PP-----RTSAEAQAVIEQLTGIKRSPQTQIKAFLKTRIGCRYRKVGYVPGKSSL  
 -EKIEEQEQRHTRLEPLeeAQRQERLVFFFDAAHFVHRAYLGF-VWCITRI----  
 -----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL  
 DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPSYSPHLNLIERLWRFVRKE  
 CLYSKYADFPAGAIQOCIDQCNAGEHKAKLTLLSLKFQSFKK"  
 /note="IS630 e-value= 6.7e-25 complete sequence hit  
 coverage= 100%, between model( 376 aa) positions 1; 376  
 length is 346aa with 33 gaps, 0 stops, absolute frame=  
 Plus2"

CDS 1313054..1314091  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="PMIKIDFTAEEIQQLNYERYHHPHPRVQRRMEVLYLKSQGLSHT  
 QICQLCQISRPTLAKEQLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH  
 PP-----RTSAEAQAVIEQLTGIKRSPQTQIKAFLKTRIGCRYRKVGYVPGKSSL  
 -EKIEEQEQRHTRLEPLeeAQRQERLVFFFDAAHFVHRAYLGF-VWCITRI----  
 -----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL  
 DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPSYSPHLNLIERLWRFVRKE  
 CLYSKYADFPAGAIQOCIDQCNAGEHKAKLTLLSLKFQSFKK"  
 /note="IS630 e-value= 4.9e-24 complete sequence hit  
 coverage= 100%, between model( 376 aa) positions 1; 376"

length is 346aa with 33 gaps, 0 stops, absolute frame= Plus2"

CDS 1313114..1313272  
/colour="255 0 0"  
/evidence=predicted  
/translation="HHPHPRVQRRMEVLYLKSQGLSHTQICQLCQISRPTLAKTLRQYQQGGIEGLK"  
/note="IS481 e-value= 3.7e-09 fragment hit coverage= 15.10%, between model( 351 aa) positions 1; 53 length is 53aa with 0 gaps, 0 stops, absolute frame= Plus2"

CDS 1525481..1525684  
/colour="255 0 0"  
/evidence=predicted  
/translation="QRYQCKDCNRRFN-ERTGTPMARLRtasSVVSYAIKARTEGMGVRAAGRTFGKSHTTIMRWEKRLADQA"  
/note="IS1\_ORF1 e-value= 2.6e-10 fragment hit coverage= 27.62%, between model( 239 aa) positions 28; 93 length is 68aa with 1 gaps, 0 stops, absolute frame= Plus2"

CDS 1529090..1529305  
/colour="255 0 0"  
/evidence=predicted  
/translation="REIHEAIGVSIRTIERVRMRFVEEG---LEAAINQRSGAGRKRKIQGEDEAHLLALRCSEPPVG----HARWTLRLAD"  
/note="IS630 e-value= 9.9e-08 fragment hit coverage= 20.74%, between model( 376 aa) positions 44; 121 length is 72aa with 7 gaps, 0 stops, absolute frame= Plus2"

CDS 1580969..1581355  
/colour="255 0 0"  
/evidence=predicted  
/translation="YADESGMDHRDEYDY-AYGPKGE-----RVYA-LKTG-RRSGRVNMIAALRAKQL--MAPFTIEGACNRTVFEIWLercLIPMLKPGQKLVI--DNATFHKGGRIOELVEKAG--CEVWYLPPYSPDLNKIERSWSWIKSRIR"  
/note="IS630 e-value= 6.9e-14 fragment hit coverage= 38.83%, between model( 376 aa) positions 188; 333 length is 129aa with 20 gaps, 0 stops, absolute frame= Plus2"

CDS 1587323..1587460  
/colour="255 0 0"  
/evidence=predicted  
/translation="WQTDGWEGYARQLPDE---VVHEVSKALTQRLERTNGIVRQQTGRWHRR"  
/note="IS1\_ORF2 e-value= 1.8e-11 fragment hit coverage= 20.68%, between model( 237 aa) positions 164; 212 length is 46aa with 3 gaps, 0 stops, absolute frame= Plus2"

CDS 1631051..1631893  
/colour="255 0 0"  
/evidence=predicted  
/translation="LDRTLRAMPTA-----YDSLTTLQWELLEPLIPIAAK-----PGGRPRTTDMRSVLNAIYLVVTGCQWRQLPHDFPCWSTVYSYFRRWRDDGTWVHINEHLMQERVSEDRHPSRAAICDAQSFKVGNPRCH-SIGFDGGKQIKGRKRHVLTGLVLVMVITTAANISDQR-GAKILFWKARRQGas1SRLVRIWADAGYQGQAFMKWVMDRFQYVLEVVIKRSDNLAGFQVIPKRWIVERTFGWLLWSRRLNKDYEVLTRTAEALVYVAMIRLMVRRLTEEAXNFSNSLL"  
/note="IS5\_IS1031 e-value= 2.8e-110 complete sequence hit coverage= 100%, between model( 295 aa) positions 1; 295 length is 281aa with 17 gaps, 1 stops, absolute frame= Plus2"

CDS 1631084..1631893  
/colour="255 0 0"  
/evidence=predicted  
/translation="YDSLTTLQWELLEPLIPIAAK-----PGGRPRTTDMRSVLNA

ILYLVVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWVHINEHLMQERVSEDRHPSP  
RAAICDAQSVKVGNPRCH-SIGFDGGKQIKGRKRHVLVDTLGLVLMIVTAANISDQR  
-GAKILFWKARRQGas1SRLVRIWADAGYQGQAFMKWVMDRFQYVLEVIKRSDNLAGF  
QVIPKRWIVERTFGWLLWSRRLNKDYEVLTRTAEALVYVAMIRLMVRRLTEAXNFSN  
SLL"  
/note="IS5\_IS1031 e-value= 1.4e-112 fragment hit  
coverage= 93.56%, between model( 295 aa) positions 20;  
295 length is 270aa with 9 gaps, 1 stops, absolute frame=  
Plus2"  
CDS 1631093..1631332  
/colour="255 0 0"  
/evidence=predicted  
/translation="DLTTLQWELLEPLIPAAKP-GGRPRT-TDMRSVLNAILYLVVTG  
CQWRQLPHDFPCWSTVSYFRRWRDDGTWVHINEHLM"  
/note="IS5\_IS427 e-value= 1.2e-18 fragment hit coverage=  
27.70%, between model( 296 aa) positions 125; 206 length  
is 80aa with 2 gaps, 0 stops, absolute frame= Plus2"  
CDS 2086388..2086531  
/colour="255 0 0"  
/evidence=predicted  
/translation="VIVIDNASFHGQRIEEEVAEAG--CEIWYLPSPDNLKIERW  
WFVLKN"  
/note="IS630 e-value= 1.7e-14 fragment hit coverage=  
13.30%, between model( 376 aa) positions 281; 330 length  
is 48aa with 2 gaps, 0 stops, absolute frame= Plus2"  
CDS 2216453..2216695  
/colour="255 0 0"  
/evidence=predicted  
/translation="VKLAELIPWESFESEYADQFSQ---TMGAPAKPFRVALGTLIIK  
EKLGISDAETVEQIRENPYLQYFLGFSEYRESAPFDASML"  
/note="IS5\_IS5 e-value= 2.6e-06 fragment hit coverage=  
19.91%, between model( 422 aa) positions 23; 106 length  
is 81aa with 3 gaps, 0 stops, absolute frame= Plus2"  
CDS 2274167..2274631  
/colour="255 0 0"  
/evidence=predicted  
/translation="LSIYYPKHASPKLR---TFSA--RLXLLHISnagXRSSIKKSIV  
ENHLGNYAVtr1TILKGMVSKDHDHTLIEYPPSKSISDIAKRLKGFTSRRRLQQEYREL  
ERRYWDKYLWALGYGAWSTGNISEQMVEEYLEHHRLVSNNNDINTFMLEXIKTLVLRRI  
"  
/note="IS200 e-value= 1.5e-09 complete sequence hit  
coverage= 100%, between model( 154 aa) positions 1; 154  
length is 155aa with 5 gaps, 3 stops, absolute frame=  
Plus2"  
CDS 2274167..2274628  
/colour="255 0 0"  
/evidence=predicted  
/translation="LSIYYPKHASPKLR---TFSARLXXXLHISNAGXRSSIKKSIVEn  
hLGNYAvtRLTILKGMVSKDHDHTLIEYPPSKSISDIAKRLKGFTSRRRLQQEYRELER  
RYWDKYLWALGYGAWSTGNISEQMVEEYLEHHRLVSNNNDINTFMLEXIKTLVLRRI"  
/note="IS200\_IS605 e-value= 3.6e-09 complete sequence hit  
coverage= 100%, between model( 153 aa) positions 1; 153  
length is 154aa with 3 gaps, 3 stops, absolute frame=  
Plus2"  
CDS 2274320..2274559  
/colour="255 0 0"  
/evidence=predicted  
/translation="TILKGMVSKDHDHTLIEYPPSKSISDIAKRLKGFTSRRRLQQEYR  
ELERRYWDKYLWALGYGAWSTGNISEQMVEEYLEHH"  
/note="IS200 e-value= 3.2e-19 fragment hit coverage=

51.95%, between model( 154 aa) positions 51; 130 length  
 is 80aa with 0 gaps, 0 stops, absolute frame= Plus2"  
 CDS 2274320..2274559  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="TILKGMVSKDHDTLIEYPPSKSISDIAKRLKGFTSRRLOQOEYR  
 ELERRYWDKYLWALGYGAWSTGNISEQMVEEYLEHH"  
 /note="IS200\_IS605 e-value= 7.4e-15 fragment hit  
 coverage= 52.29%, between model( 153 aa) positions 51;  
 130 length is 80aa with 0 gaps, 0 stops, absolute frame=  
 Plus2"  
 CDS 2409029..2410090  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="IVKRXKN-----EQCIVSHpYPALXPPQPLAQG---ISSA---  
 --RQXHFXESEQRRQRXSENCSVRASSRPIDAIRDRKSLNVLTP--NQKRQMVROQI  
 QDYSIROICQVLNPYPRSQVYYHARGQP---DESELKAAIAVGAGAYP-TYGYRRI  
 TAQLQ---RQGYCVNHKRVARLMRQIGIMAKTKVK-RKRTTNSEHSfpRYGNRVLNLS  
 --IDHPEQVWWADITYIRLQ-QEFVYLAVVMDVFTRAIRGWHLRSRHIDQQLTLRALNK  
 ALERAT---PEIHHS----DQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAER  
 LMRTIKEEEVD--LSDYRNFTEAYPEHIEQFLEDVYMHKRIHSSLGYLTPCEYEQQWRQ  
 Q"  
 /note="IS3\_IS150\_ORF2 e-value= 1.7e-22 complete sequence  
 hit coverage= 100%, between model( 389 aa) positions 1;  
 389 length is 354aa with 39 gaps, 5 stops, absolute  
 frame= Plus2"  
 CDS 2409203..2410087  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="PIDAAIRDRKKSLnVLTPNQKRQMVROQDYSIROICQVLNPY  
 RSQVYYHARGQPDESELKAAIAVG-AGAYPTGYRRITAQLQROGYCVNHKRVARLMR  
 QIGIMAKTKVK---RKRTTNSEHSF-PRYGNRv1NLSIDHPEQVWWADITYIRL--Q  
 QEFVYLAVVMDVFTRAIRGWHLRSRHIDQQLTLRALNKALER---ATPEIHSDQGVQ  
 YAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT--EAYE  
 HIEQFLEDVYMHKRIHSSLGYLTPCEYEQQWRQ"  
 /note="IS3\_IS150\_ORF1 e-value= 4.3e-49 complete sequence  
 hit coverage= 100%, between model( 306 aa) positions 1;  
 306 length is 295aa with 14 gaps, 0 stops, absolute  
 frame= Plus2"  
 CDS 2409239..2410123  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="LNVLTPNQK-RQMVROQdYSIROICQVLNPY---RSQVYYHA  
 RgQPDESELKA--AIAGV-----AGA---YPTYGYRRITAQLQROGYCVNHKRVAR  
 LMRQIGIMAKTKVKRKRTTNSEHSFPRYGNRVL-NLSIDHPEQVWWADITYIRLQQEF  
 VYLAVVMDVFTRAIRGWHLRSRHIDQQLTLRALNKALERATPE-----IHHSQGV  
 QYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIKEEEVDLSDYrnFTEAYEH  
 IEQFLEDV--YMHKRIHSSLGYLTPCEYEQQWRQNNHYCMNKEDS"  
 /note="IS3\_IS51\_ORF2 e-value= 1.6e-26 complete sequence  
 hit coverage= 100%, between model( 317 aa) positions 1;  
 317 length is 295aa with 27 gaps, 0 stops, absolute  
 frame= Plus2"  
 CDS 2409245..2409499  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="VLTPNQKRQMVROQDYSIROICQVLNPYPRSQVYYHARGQP  
 DESELKAAIAVGAGAYPTGYRRITAQLQROGYCVNHKRVARL"  
 /note="IS3\_IS407\_ORF2 e-value= 1.2e-17 fragment hit  
 coverage= 25.29%, between model( 344 aa) positions 60;  
 146 length is 85aa with 2 gaps, 0 stops, absolute frame=

```

Plus2"
CDS 2409263..2410090
/colour="255 0 0"
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RKRTTNSEHSfpPRYGNRLNLS--IDHPEQVWVADITYIRLQ-QEFVYLA VVMDVFT
AIRGWHLRSRHIDQQLTLRALNKALERAT---PEIHHS-----DQGVQYAAAAYMQLLO
QHQVQISMAEVGQAWQNGYAERLMRTIKEEEVD--LSDYRNFT EAYEHIEQFLEDVYM
HKRIHSSLGYLTPCEYEQQWRQQ"
/note="IS3_IS150_ORF2      e-value= 2.2e-47 fragment hit
coverage= 76.09%, between model( 389 aa) positions 94;
389 length is 276aa with 23 gaps, 0 stops, absolute
frame= Plus2"
CDS 2409266..2410114
/colour="255 0 0"
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IRGWHLRSRHIDQQLT-LRALNKALERATPE-----IHHSDQGVQYAAAAYMQLLOQ
HQVQISMAEVGQAWQNGYAERLMRTIKEEEVDL---S-DYRNFT EAYEHIEQFLEDVY
MHKRIHSSLGYLTPCEYEQQWRQONNNHYCMNK"
/note="IS3_IS51_ORF1      e-value= 8.1e-53 complete sequence
hit coverage= 100%, between model( 307 aa) positions 1;
307 length is 283aa with 25 gaps, 0 stops, absolute
frame= Plus2"
CDS 2409266..2410114
/colour="255 0 0"
/evidence=predicted
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IRGWHLRSRHIDQQLT-LRALNKALERATPE-----IHHSDQGVQYAAAAYMQLLOQ
HQVQISMAEVGQAWQNGYAERLMRTIKEEEVDL---S-DYRNFT EAYEHIEQFLEDVY
MHKRIHSSLGYLTPCEYEQQWRQONNNHYCMNK"
/note="IS3_IS51_ORF1      e-value= 6.3e-51 complete sequence
hit coverage= 100%, between model( 307 aa) positions 1;
307 length is 283aa with 25 gaps, 0 stops, absolute
frame= Plus2"
CDS 2409269..2410084
/colour="255 0 0"
/evidence=predicted
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TTNSEHSfPRYGNRLNLS-IDHPEQVWVADITYIRLQQE FVYLA VVMDVFTRAIRGW
HLSRHIDQQLTLRALNKALERA-TPE--IHHSDQGVQYAAAAYMQLLOQHQVQISMAE
VGQAWQNGYAERLMRTIK-EEEVDL-SDYRNFT EAYEHIEQFLEDVYMHKRIHSSLG
LTPCEYEQQWR"
/note="IS3_IS3_ORF1      e-value= 9.5e-54 complete sequence
hit coverage= 100%, between model( 286 aa) positions 1;
286 length is 272aa with 15 gaps, 0 stops, absolute
frame= Plus2"
CDS 2409269..2410084
/colour="255 0 0"
/evidence=predicted
/translation="QMVRQLQQDYSIRQICQVLNYPRSQVYYHARG--QPD----ES
ELKAAI-AGVAGAYPTYGYRRITAQLQ-RQGCVNHKRVARLMRQIGIMAKTKVKRKR
TTNSEHSfPRYGNRLNLS-IDHPEQVWVADITYIRLQQE FVYLA VVMDVFTRAIRGW
HLSRHIDQQLTLRALNKALERA-TPE--IHHSDQGVQYAAAAYMQLLOQHQVQISMAE

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VGQAWQNGYAERLMRTIK-EEEVDL-SDYRNFT EAYE HIEQFLEDVYMHKRIHSSLGY  
 LTPCEYEQQWR"

/note="IS3\_IS3\_ORF1 e-value= 2.5e-54 complete sequence  
 hit coverage= 100%, between model( 286 aa) positions 1;  
 286 length is 272aa with 15 gaps, 0 stops, absolute  
 frame= Plus2"

CDS 2409272..2410087  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="MVRQLQQDYSIROICQVLNYPRSQVYYHARGQPDESELKAAIAG  
 V-AGAYPTYGYRRITAQLQRQGCVNHKRVARLMRQIGIMAKTKVK----RKRTTNSE  
 HSF-PRYGNRv1NLSIDHPEQVWADITYIRL--QQEfvylavvmdvftrairgwhls  
 RHIDQQLTLRALNKALER---ATPEIHHSDQGVQYAAAAYMQLLQQHQVQISM  
 QAWQNGYAERLMRTIKEEEVDLSDYRNFT--EAYE HIEQFLEDVYMHKRIHSSLGYLT  
 PCEYEQQWRQ"

/note="IS3\_IS150\_ORF1 e-value= 6.3e-50 fragment hit  
 coverage= 92.81%, between model( 306 aa) positions 23;  
 306 length is 272aa with 14 gaps, 0 stops, absolute  
 frame= Plus2"

CDS 2409281..2410096  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="OLOQDYSIROICQVLNYPRSQVYYHARGQPDE-----SEL  
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 EHSFPRY---GNRVLNLSIDHPEQVWADITYIRLQQEFVYLA VVMDVFTRAIRGWHL  
 SRHIDQQLTLRALNKALER---ATPE---IHHS DQGVQYAAAAYMQLLQQHQVQISM  
 AEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT EAYE HIEQFLEDVYMHKRIHSSLGY  
 LTPCEYEQQWRQQNN"

/note="IS3\_IS3\_ORF2 e-value= 1.2e-64 complete sequence  
 hit coverage= 100%, between model( 288 aa) positions 1;  
 288 length is 272aa with 19 gaps, 0 stops, absolute  
 frame= Plus2"

CDS 2409281..2410096  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="OLQQDYSIROICQVLNYPRSQVYYHARGQPDE-----SEL  
 KAAIAGVAGaypTYGYRRITAQLQRQGCVNHKRVARLMRQIGIMAKTKVKRKRTTNS  
 EHSFPRY---GNRVLNLSIDHPEQVWADITYIRLQQEFVYLA VVMDVFTRAIRGWHL  
 SRHIDQQLTLRALNKALER---ATPE---IHHS DQGVQYAAAAYMQLLQQHQVQISM  
 AEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT EAYE HIEQFLEDVYMHKRIHSSLGY  
 LTPCEYEQQWRQQNN"

/note="IS3\_IS3\_ORF2 e-value= 3.3e-65 complete sequence  
 hit coverage= 100%, between model( 288 aa) positions 1;  
 288 length is 272aa with 19 gaps, 0 stops, absolute  
 frame= Plus2"

CDS 2409350..2409508  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="YHArgQPDESELKAAIAGVAGAYPTYGYRRITAQLQRQGY---  
 -CVNHKRVARLMRQ"

/note="IS3\_IS2\_ORF2 e-value= 9.1e-09 fragment hit  
 coverage= 18.87%, between model( 302 aa) positions 48;  
 104 length is 53aa with 5 gaps, 0 stops, absolute frame=  
 Plus2"

CDS 2409416..2410099  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="YPTYGYRRITAQLQRQGCVNHKRVARLMRQIGIMAKTKVKRK  
 TTNSEHSFPRYGNRVL-NLSIDHPEQVWADITYIRLQQEFVYLA VVMDVFTRAIRG  
 WHLSRHIDQQLTLRALNKALERATPE-----IHHS DQGVQYAAAAYMQLLQQHQVQ"

ISMAEVGQAWQNGYAERLMRTIKEEEVDLSDYrnFTEAYEHIEQFLEDV--YMHKRIH  
 SSLGYLTPCEYEQQWRQQNNH"  
 /note="IS3\_IS51\_ORF2 e-value= 1.9e-38 fragment hit  
 coverage= 74.76%, between model( 317 aa) positions 73;  
 309 length is 228aa with 11 gaps, 0 stops, absolute  
 frame= Plus2"  
 CDS 2500838..2501899  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="IVKRXKN-----EQCIVSHpYPALXPPQPLAQG---ISSA---  
 --RQXHFXESEQRRQRXSENCVRASSRPIDAAIRDRKSLNVLTP--NQKRQMVRQL  
 QODYSIROQICQVLNYPRSQVYYHARGQP----DESELKAAIAGVAGAYP-TYGYRRI  
 TAOLO---RQGYCVNKHKRVARLMRQIGIMAKTKVK-RKRTTNSEHSfpRYGNRVLNLS  
 --IDHPEQVWVADITYIRLQ-QEFVYLAVVMDVFTRAIRGWHLRSRHIDQQLTLRALNK  
 ALERAT---PEIHHS----DQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAER  
 LMRTIKEEEVD--LSDYRNFTFEAYEHIEQFLEDVYMHKRIHSSLGYLTPCEYEQQWRQ  
 Q"  
 /note="IS3\_IS150\_ORF2 e-value= 1.7e-22 complete sequence  
 hit coverage= 100%, between model( 389 aa) positions 1;  
 389 length is 354aa with 39 gaps, 5 stops, absolute  
 frame= Plus2"  
 CDS 2501012..2501896  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="PIDAAIRDRKKSLnVLTPNQKRQMVRQLQQDYSIROQICQVLNYP  
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 QIGIMAKTKVK---RKRTTNSEHSF-PRYGNRv1NLSIDHPEQVWVADITYIRL--Q  
 QEFVYLAVVMDVFTRAIRGWHLRSRHIDQQLTLRALNKALER---ATPEIHHSQGVQ  
 YAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT--EAYE  
 HIEQFLEDVYMHKRIHSSLGYLTPCEYEQQWRQ"  
 /note="IS3\_IS150\_ORF1 e-value= 4.3e-49 complete sequence  
 hit coverage= 100%, between model( 306 aa) positions 1;  
 306 length is 295aa with 14 gaps, 0 stops, absolute  
 frame= Plus2"  
 CDS 2501048..2501932  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="LNVLTPNQK-RQMVRQLQqdYSIROQICQVLNYP---RSQVYYHA  
 RgQPDESELKA--AIAGV-----AGA--YPTYGYRRITAQLQROGYCVNKHKRVAR  
 LMRQIGIMAKTKVKRKRTTNSEHSFPRYGNRVL-NLSIDHPEQVWVADITYIRLQQEF  
 VYLA VVMDVFTRAIRGWHLRSRHIDQQLTLRALNKALERATPE-----IHHSQGV  
 QYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIKEEEVDLSDYrnFTEAYEH  
 IEQFLEDV--YMHKRIHSSLGYLTPCEYEQQWRQQNNHYCMNKEDS"  
 /note="IS3\_IS51\_ORF2 e-value= 1.6e-26 complete sequence  
 hit coverage= 100%, between model( 317 aa) positions 1;  
 317 length is 295aa with 27 gaps, 0 stops, absolute  
 frame= Plus2"  
 CDS 2501054..2501308  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="VLTPNQKRQMVRQLQQDY--SIROQICQVLNYPRSQVYYHARGQP  
 DESELKAAIAGVAGAYPTYGYRRITAQLQROGYCVNKHKRVARL"  
 /note="IS3\_IS407\_ORF2 e-value= 1.2e-17 fragment hit  
 coverage= 25.29%, between model( 344 aa) positions 60;  
 146 length is 85aa with 2 gaps, 0 stops, absolute frame=  
 Plus2"  
 CDS 2501072..2501899  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="KRQMVRQLQQDYSIROQICQVLNYPRSQVYYHARGQP----DES

ELKAAIAGVAGAYP-TYGYRRITAQLQ---RQGYCVNHKRVARLMRQIGIMAKTKV-K  
RKRTTNSEHsfpRYGNRVLNLS--IDHPEQVWVADITYIRLQ-QEFVYLVAVMDVFT  
AIRGWHLRSRHIDQQLTLRALNKALERAT---PEIHHS----DQGVQYAAAAYMQLLO  
HQVQISMAEVGQAWQNGYAERLMRTIKEEEVD--LSDYRNFTEAYEHIEQFLEDVYM  
MHKRIHSSLGILTPCEYEQQWRQQ"  
/note="IS3\_IS150\_ORF2 e-value= 2.2e-47 fragment hit  
coverage= 76.09%, between model( 389 aa) positions 94;  
389 length is 276aa with 23 gaps, 0 stops, absolute  
frame= Plus2"  
CDS 2501075..2501923  
/colour="255 0 0"  
/evidence=predicted  
/translation="RQMVRLQOQDYSIROICQVLNYPRSQVYYHA-----RG  
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IRGWHLRSRHIDQQLT-LRALNKALERATPE-----IHHSQGVQYAAAAYMQLLO  
HQVQISMAEVGQAWQNGYAERLMRTIKEEEVDL--S-DYRNFTEAYEHIEQFLEDVY  
MHKRIHSSLGILTPCEYEQQWRQQNNHYCMNK"  
/note="IS3\_IS51\_ORF1 e-value= 8.1e-53 complete sequence  
hit coverage= 100%, between model( 307 aa) positions 1;  
307 length is 283aa with 25 gaps, 0 stops, absolute  
frame= Plus2"  
CDS 2501075..2501923  
/colour="255 0 0"  
/evidence=predicted  
/translation="RQMVRLQOQDYSIROICQVLNYPRSQVYYHA-----RG  
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IRGWHLRSRHIDQQLT-LRALNKALERATPE-----IHHSQGVQYAAAAYMQLLO  
HQVQISMAEVGQAWQNGYAERLMRTIKEEEVDL--S-DYRNFTEAYEHIEQFLEDVY  
MHKRIHSSLGILTPCEYEQQWRQQNNHYCMNK"  
/note="IS3\_IS51\_ORF1 e-value= 6.3e-51 complete sequence  
hit coverage= 100%, between model( 307 aa) positions 1;  
307 length is 283aa with 25 gaps, 0 stops, absolute  
frame= Plus2"  
CDS 2501078..2501893  
/colour="255 0 0"  
/evidence=predicted  
/translation="QMVRQLQQDYSIROICQVLNYPRSQVYYHARG--OPD----ES  
ELKAAI-AGVAGAYPTYGYRRITAQLQ-RQGYCVNHKRVARLMRQIGIMAKTKVKRKR  
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HLSRHIDQQLTLRALNKALERA-TPE--IHHSQGVQYAAAAYMQLLOHQVQISMAE  
VGQAWQNGYAERLMRTIK-EEEVDL-SDYRNFTEAYEHIEQFLEDVYMHKRIHSSLG  
LTPCEYEQQWR"  
/note="IS3\_IS3\_ORF1 e-value= 9.5e-54 complete sequence  
hit coverage= 100%, between model( 286 aa) positions 1;  
286 length is 272aa with 15 gaps, 0 stops, absolute  
frame= Plus2"  
CDS 2501078..2501893  
/colour="255 0 0"  
/evidence=predicted  
/translation="QMVRQLQQDYSIROICQVLNYPRSQVYYHARG--OPD----ES  
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TTNSEHSfPRYGNRVLNLS-IDHPEQVWVADITYIRLQQEfvylavvmdvft  
HLSRHIDQQLTLRALNKALERA-TPE--IHHSQGVQYAAAAYMQLLOHQVQISMAE  
VGQAWQNGYAERLMRTIK-EEEVDL-SDYRNFTEAYEHIEQFLEDVYMHKRIHSSLG  
LTPCEYEQQWR"  
/note="IS3\_IS3\_ORF1 e-value= 2.5e-54 complete sequence  
hit coverage= 100%, between model( 286 aa) positions 1;  
286 length is 272aa with 15 gaps, 0 stops, absolute

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frame= Plus2"
CDS 2501081..2501896
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/evidence=predicted
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HSF-PRYGNRv1NLSIDHPEQVVADITYIRL--QQEfvylavvmdvftrairgwls
RHIDQQLTLRALNKALER---ATPEIHHSDQGVQYAAAAYMQLLQQHQVQISMaeVG
QAWQNGYAERLMRTIKEEEVDLSDYRNFT--EAYEHIEQFLEDVYMHKRIHSSLGYLT
PCEYEQQWRQ"
/note="IS3_IS150_ORF1      e-value= 6.3e-50 fragment hit
coverage= 92.81%, between model( 306 aa) positions 23;
306 length is 272aa with 14 gaps, 0 stops, absolute
frame= Plus2"
CDS 2501090..2501905
/colour="255 0 0"
/evidence=predicted
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KAAIAGVAGayptGYRRITAQLQRQGCVNHKRVARLMRQIGIMAKTKVKRKRTTNS
EHSFPRY---GNRVLNLSIDHPEQVVADITYIRLQQEFVYLA VVMDVFTRAIRGWHL
SRHIDQQLTLRALNKALER---ATPE---IHHSQGVQYAAAAYMQLLQQHQVQISM
AEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT EAYEHIEQFLEDVYMHKRIHSSLGY
LTPCEYEQQWRQONN"
/note="IS3_IS3_ORF2      e-value= 1.2e-64 complete sequence
hit coverage= 100%, between model( 288 aa) positions 1;
288 length is 272aa with 19 gaps, 0 stops, absolute
frame= Plus2"
CDS 2501090..2501905
/colour="255 0 0"
/evidence=predicted
/translation="OLQQDYSIROQICQVLNYPRSQVYYHARGQPDE-----SEL
KAAIAGVAGayptGYRRITAQLQRQGCVNHKRVARLMRQIGIMAKTKVKRKRTTNS
EHSFPRY---GNRVLNLSIDHPEQVVADITYIRLQQEFVYLA VVMDVFTRAIRGWHL
SRHIDQQLTLRALNKALER---ATPE---IHHSQGVQYAAAAYMQLLQQHQVQISM
AEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT EAYEHIEQFLEDVYMHKRIHSSLGY
LTPCEYEQQWRQONN"
/note="IS3_IS3_ORF2      e-value= 3.3e-65 complete sequence
hit coverage= 100%, between model( 288 aa) positions 1;
288 length is 272aa with 19 gaps, 0 stops, absolute
frame= Plus2"
CDS 2501159..2501317
/colour="255 0 0"
/evidence=predicted
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-CVNHKRVARLMRQ"
/note="IS3_IS2_ORF2      e-value= 9.1e-09 fragment hit
coverage= 18.87%, between model( 302 aa) positions 48;
104 length is 53aa with 5 gaps, 0 stops, absolute frame=
Plus2"
CDS 2501225..2501908
/colour="255 0 0"
/evidence=predicted
/translation="YPTYGYRRITAQLQRQGCVNHKRVARLMRQIGIMAKTKVKRKRTTNS
EHSFPRYGNRVL-NLSIDHPEQVVADITYIRLQQEFVYLA VVMDVFTRAIRGWHL
SRHIDQQLTLRALNKALERATPE-----IHHSQGVQYAAAAYMQLLQQHQVQISM
AEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT EAYEHIEQFLEDV--YMHKRIHSSLGY
LTPCEYEQQWRQONNH"
/note="IS3_IS51_ORF2      e-value= 1.9e-38 fragment hit
coverage= 74.76%, between model( 317 aa) positions 73;
309 length is 228aa with 11 gaps, 0 stops, absolute

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frame= Plus2"  
CDS 2629103..2629798  
/colour="255 0 0"  
/evidence=predicted  
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAS  
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QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK  
PQIAAGMIROLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
AEQAVFAEPWQSFERTFSNGTTETRYrQEIIYGqrhhQKRY"  
/note="IS4 e-value= 4.7e-14 fragment hit coverage=  
51.23%, between model( 486 aa) positions 1; 249 length is  
232aa with 27 gaps, 0 stops, absolute frame= Plus2"  
CDS 2629103..2630230  
/colour="255 0 0"  
/evidence=predicted  
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAS  
hLSDkRLDIILKILDGRRILLID-----ETGDKKGKSTDYVKR  
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK  
PQIAAGMIROLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
AEQAVFAEPWQSFERTFSNGT-----TTRYR  
QEIIYGQRHHQKRYWLTTDPQTLPENSTS-----YVMAA  
APE----IKLDEIGDCYGFRTWIEYGLQSKD-TLGWADFRMTHYEQIEKWWEIVMSA  
FLMVSLFADVFNDS-----CPVAHQHFAOHPwWDNQNG  
WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"  
/note="IS4 e-value= 9.9e-07 complete sequence hit  
coverage= 100%, between model( 486 aa) positions 1; 486  
length is 376aa with 117 gaps, 0 stops, absolute frame=  
Plus2"  
CDS 2631026..2631439  
/colour="255 0 0"  
/evidence=predicted  
/translation="GRQRFNVNLGALNAVTS---ITNHTYINSHSMCLLLAKLALLDPV  
I--PISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPSYSPHLNLIERLWRFVRKECL  
YSKYYSDFHSFKGAIQQCIDQCNCTEHKAKLTSLLSLKFQSFQK"  
/note="IS630 e-value= 1.1e-17 fragment hit coverage=  
38.56%, between model( 376 aa) positions 232; 376 length  
is 138aa with 7 gaps, 0 stops, absolute frame= Plus2"  
CDS 2714843..2715040  
/colour="255 0 0"  
/evidence=predicted  
/translation="GKHKQILLVLDGAGWHTC---KNRVVPPG--IHLKILPPYSPEL  
OPAERLWRLADEPLAN-QCFETLDDLED"  
/note="IS630 e-value= 1.4e-09 fragment hit coverage=  
19.15%, between model( 376 aa) positions 275; 346 length  
is 66aa with 6 gaps, 0 stops, absolute frame= Plus2"  
CDS 2845484..2846386  
/colour="255 0 0"  
/evidence=predicted  
/translation="QRFIQGLSPETIHLLSRIHRHSYHHQVRQRACILLSFEGFNVT  
ELMSIFAVTRKTVTWLDDWDNH---LVGLYDQPGRGRKPKLNDVQ-KEQIRAWAKM  
TP-----HNLNAVLAKIKEAWNIAVSCKTLKRILKSCSMSWRRLRRVAGQPDP  
VEYETK-----RHOLEVLKRQEEKGELdlyLDESGFCLVPYVPY-AWOEKG-----  
-----ETLGLPSQRSSRFNVGLMNRHNDL-TSYVFDKSITSAVVVACIDDSRT  
C--DQHTVVVMDQASVHKNAEIEEKIEDWKAKNVEIFWLPTYSPHLNIEIFWRFMKY  
EWI"  
/note="IS630 e-value= 1.1e-24 fragment hit coverage=  
88.56%, between model( 376 aa) positions 1; 333 length is  
301aa with 36 gaps, 0 stops, absolute frame= Plus2"  
CDS 2845484..2846518  
/colour="255 0 0"

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/evidence=predicted
/translation="QRFIQGLSPETIHLLSRIHRHSYHHQVRORAHCILLSFEGFNVT
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TP-----HNLNAVLAKIKEAWNIAVSKTTLKRILKSCSMSWRRLRRVAGQPDP
VEYETK----RHQLEVLKRQEEKGELd1rYLDESGFCCLVPYVPY-AWQEKG-----
-----ETLGLPSQRSSRFNVGLMNRHNDL-TSYVFDKSITSAVVVACIDDSRT
C--DQHTVVVMDQASVHKNAEIEEKIEDWKAKNVEIFWLPTYSPHLNIEIFWRFMKY
EWIEFAAYKCLGSLSLYIDKILKGFgKDYVIDFGXVLINFXLTQOLL"
/note="IS630 e-value= 5.3e-21 complete sequence hit
coverage= 100%, between model( 376 aa) positions 1; 376
length is 345aa with 36 gaps, 2 stops, absolute frame=
Plus2"
CDS 3258380..3259537
/colour="255 0 0"
/evidence=predicted
/translation="SSNSFRAKTPSIXKVG-ILNSNHQIT-----FHVSSSTQVF
ACCPVCNQITHRVHSRYERTLRDLPVCDFCLTILLQVCKFFCRNeaCKRCIFTERlpk
vaVPWARKTIREFAEHLTSIGLALGAAAARLSYQINYGSSRNT---MLRSIAKLEPP
-PAPTPKILGVDDFAFQRG--HHYGTILVDLEHH---RTIALLPDRDAKTLVAWLEE
HP-----GVEILSRDRSKTYKSAISEGAPNAIQVADRFHLLKNLQEVLEKVF-----
-----HSNYPALKSVDAALLKS-EVPEPHAPESNEKSKVP-PDE
QgPRSRAH----RLNNYQQTHALKQQGYXVTDIAHHLGIAKRTAYQ-YLSHPFFPEH
OPYTRKVPTVIEP-YKDY-----LYQEWMAGRQNSYCTK-----YRdALIGHK
SIKCVKTNDLD"
/note="ISL3 e-value= 4e-07 complete sequence hit
coverage= 100%, between model( 451 aa) positions 1; 451
length is 386aa with 75 gaps, 2 stops, absolute frame=
Plus2"
CDS 3258827..3259108
/colour="255 0 0"
/evidence=predicted
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LEKV"
/note="ISL3 e-value= 1.4e-18 fragment hit coverage=
23.50%, between model( 451 aa) positions 157; 262 length
is 94aa with 12 gaps, 0 stops, absolute frame= Plus2"
CDS 3307874..3309085
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LDEV--YPIVYLDALYVNIKVNGQVSKRAVYVALAVTVEGNKELLGLWIGAAerEGAK
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LNWKAALSHFAILFPTRFNYXI"
/note="IS256 e-value= 1.4e-166 complete sequence hit
coverage= 100%, between model( 410 aa) positions 1; 410
length is 404aa with 11 gaps, 1 stops, absolute frame=
Plus2"
CDS 3307874..3309085
/colour="255 0 0"
/evidence=predicted
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LDEV--YPIVYLDALYVNIKVNGQVSKRAVYVALAVTVEGNKELLGLWIGAAerEGAK
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KESRAVAADLKPIYQAATLE-ESEAALDAFAH-KWDETYPGISQIWIRHWDNVAPLFO  
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/note="IS256 e-value= 3.7e-167 complete sequence hit  
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length is 404aa with 11 gaps, 1 stops, absolute frame=  
Plus2"  
CDS 3753371..3754582  
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LDEV--YPIVYLDALYVNIKVNGQVSKRASYVALAVTVEGNKELLGLWIGAAerEGAK  
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length is 404aa with 11 gaps, 1 stops, absolute frame=  
Plus2"  
CDS 3911570..3912511  
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RRTWRKLHLSVDESTGEILTGVVTTNDVQDGEVFEDLLEGIDD-----EIEQVSAD-G  
AYDQSHCYDALMERNATAIIPPRKNA-----KIWQHGNC--NApphpRDQ  
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LN-RMIQIAKPETVWVE"  
/note="IS5\_IS903 e-value= 1.1e-96 complete sequence hit  
coverage= 100%, between model( 347 aa) positions 1; 347  
length is 314aa with 37 gaps, 1 stops, absolute frame=  
Plus2"  
CDS 3911570..3912511  
/colour="255 0 0"  
/evidence=predicted  
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RRKGQLSISLPVIPKQGAIHVVIDSTGVKVG-----EGEWKTRQHGVS-K  
RRTWRKLHLSVDESTGEILTGVVTTNDVQDGEVFEDLLEGIDD-----EIEQVSAD-G  
AYDQSHCYDALMERNATAIIPPRKNA-----KIWQHGNC--NApphpRDQ  
NLRAIRKQGRKRWKQAHYHRRSLAETTMFRFKTIFGGQVRSRNFDNQATELLLQCAA

LN-RMIQIAKPETVWVE"  
/note="IS5\_IS903 e-value= 2.2e-96 complete sequence hit  
coverage= 100%, between model( 347 aa) positions 1; 347  
length is 314aa with 37 gaps, 1 stops, absolute frame=  
Plus2"  
CDS 4126139..4127350  
/colour="255 0 0"  
/evidence=predicted  
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LDEV--YPIVYLDALYVNIKVNGQVSRAVYVALAVTVEGNKELLGLWIGAAerEGAK  
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KESRAVAADLKPIYQAATLE-ESEAALDAFAH-KWDETYPGISQIWIRHWDNVAPLFQ  
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LNWKAALSHFAILFPTRFNYXIH"  
/note="IS256 e-value= 1.4e-166 complete sequence hit  
coverage= 100%, between model( 410 aa) positions 1; 410  
length is 404aa with 11 gaps, 1 stops, absolute frame=  
Plus2"  
CDS 4126139..4127350  
/colour="255 0 0"  
/evidence=predicted  
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NDQS-GDeNSNGPRNSRNGYSKKTVQSEQG-EMDLSIPRDRG-EFEPVLVPKGQRRI  
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LDEV--YPIVYLDALYVNIKVNGQVSRAVYVALAVTVEGNKELLGLWIGAAerEGAK  
FWLSVLTDLKNRGTQDILIAACCDGLKGFPQAIESVYPQTQVQVCIVHLIRNSLRHVPW  
KESRAVAADLKPIYQAATLE-ESEAALDAFAH-KWDETYPGISQIWIRHWDNVAPLFQ  
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/note="IS256 e-value= 3.7e-167 complete sequence hit  
coverage= 100%, between model( 410 aa) positions 1; 410  
length is 404aa with 11 gaps, 1 stops, absolute frame=  
Plus2"  
CDS 4199279..4199470  
/colour="255 0 0"  
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/translation="ATPIELSQQQHHCLLQIVRQTINPYRLVRRASIILSAASGKSNT  
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/note="IS630 e-value= 8.9e-08 fragment hit coverage=  
17.02%, between model( 376 aa) positions 1; 64 length is  
64aa with 0 gaps, 0 stops, absolute frame= Plus2"  
CDS 4226972..4227316  
/colour="255 0 0"  
/evidence=predicted  
/translation="KYIVTLTPEERSELIQLTRRTLSARKMKRAQILMLADEGHKDD  
TITQMLNAGISTVHRTRQKFVEGG---VEfALNERPRPGGQKKLDSKAEALLIATACS  
DPPTG---CCRWTMQLLAE"  
/note="IS630 e-value= 1.2e-15 fragment hit coverage=  
32.18%, between model( 376 aa) positions 1; 121 length is  
115aa with 7 gaps, 0 stops, absolute frame= Plus2"  
CDS 4926788..4927030  
/colour="255 0 0"  
/evidence=predicted  
/translation="VKLAELIPWESFESEYADQFSQ---TMGAPAKPFRVALGTLIIK  
EKLGISDAETVEQIRENPYLQYFLGFSEYRESAPFDASML"  
/note="IS5\_IS5 e-value= 2.6e-06 fragment hit coverage=  
19.91%, between model( 422 aa) positions 23; 106 length  
is 81aa with 3 gaps, 0 stops, absolute frame= Plus2"

CDS 5053775..5054902  
/colour="255 0 0"  
/evidence=predicted  
/translation="PFASIIIEHFSDDPRAAHRIEYLEDIIFITCAVLCGADNWV  
EVANYGCSKAQWLKQWIALPNG-----IPSHDTFEWFARLKPQQLQQCFLNWTQAI  
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IPELLKILELEG-ALVSIDAMGCQTAIAETIIEGQG-DYVLALKGNQGDLYNDVVQLF  
dhaCOTOFQGIEHDSYOTVEKGHRGIEHRTYWTMGQTDYLLGAE-RWAOLKSIGCVES  
CRRQPGHPG---TLQRRYYLLSIESDAQR---FADAVRSHWGIENQLHWILDVGRED  
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"  
/note="ISAs1 e-value= 1.9e-150 complete sequence hit  
coverage= 100%, between model( 389 aa) positions 1; 389  
length is 376aa with 16 gaps, 0 stops, absolute frame=  
Plus2"

CDS 5053775..5054902  
/colour="255 0 0"  
/evidence=predicted  
/translation="PFASIIIEHFSDDPRAAHRIEYLEDIIFITCAVLCGADNWV  
EVANYGCSKAQWLKQWIALPNG-----IPSHDTFEWFARLKPQQLQQCFLNWTQAI  
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IPELLKILELEG-ALVSIDAMGCQTAIAETIIEGQG-DYVLALKGNQGDLYNDVVQLF  
dhaCOTOFQGIEHDSYOTVEKGHRGIEHRTYWTMGQTDYLLGAE-RWAOLKSIGCVES  
CRRQPGHPG---TLQRRYYLLSIESDAQR---FADAVRSHWGIENQLHWILDVGRED  
KLRACQGYSAQNLSVIRHIAANLLOQUESTAKCGVKAKRLKAGWDDDYLVKILSAAAKG  
"  
/note="ISAs1 e-value= 1.5e-144 complete sequence hit  
coverage= 100%, between model( 389 aa) positions 1; 389  
length is 376aa with 16 gaps, 0 stops, absolute frame=  
Plus2"

CDS 5055743..5055940  
/colour="255 0 0"  
/evidence=predicted  
/translation="ASPIELSQQQHHCLTQIVRQTTNPYRLVRRASIILSAASGESNT  
QISRQWQLDRNQVRYWRQRWLD"  
/note="IS630 e-value= 4e-07 fragment hit coverage=  
17.55%, between model( 376 aa) positions 1; 66 length is  
66aa with 0 gaps, 0 stops, absolute frame= Plus2"

CDS 5176034..5176441  
/colour="255 0 0"  
/evidence=predicted  
/translation="MLLVRPISTESLRLHRIYHSSRHQVRQRAHCLILFAQGWPPY  
TLASLFSVSPKTVYNWLKAWNNRG---FAGLYNHPGRGRKPMFNPDQQQIYEWT-QA  
SPIQ-----LNQVLAQIEQQWSVRVSKATVKRVLKQMDMSWHR"  
/note="IS630 e-value= 8.7e-15 fragment hit coverage=  
39.63%, between model( 376 aa) positions 1; 149 length is  
136aa with 13 gaps, 0 stops, absolute frame= Plus2"

CDS 5176094..5176432  
/colour="255 0 0"  
/evidence=predicted  
/translation="SSRHQVRQRAHCLILFAQGWPPYTLASLFSVSPKTVYNWLKAW  
NNRGFAGLYNH---PGRGRKPMfNPDQQQIYEWTQASPIQLNOVLAQIEQQWSVR--  
-VSKATVKRVLKQMDMS"  
/note="IS481 e-value= 3.5e-09 fragment hit coverage=  
33.62%, between model( 351 aa) positions 1; 118 length is  
113aa with 6 gaps, 0 stops, absolute frame= Plus2"

CDS 5341466..5341705  
/colour="255 0 0"  
/evidence=predicted  
/translation="RNQQHYIRQLTAIKLLNEGHSRTQVSEQVGCSYDTLTRWMDKY

LDGGLQGLVQPI--RHQKPSRLSPEEQQQLKEMVLTQR"  
/note="IS481 e-value= 1.2e-07 fragment hit coverage= 23.36%, between model( 351 aa) positions 1; 82 length is 80aa with 2 gaps, 0 stops, absolute frame= Plus2"  
CDS 5341493..5341900  
/colour="255 0 0"  
/evidence=predicted  
/translation="RLTAIKLLNEGHHSRTQVSEQVGCSYDTLTRWMDKYLDGG---LQGLVQPIRHQKPSRLSPEEQQQLKEMVLTQRPTDYGIDRNMWTGAILAVVIEQRFEVQLKDSRIYELLSELGLSYQRAHRYA---NADLNAQKEWVA"  
/note="IS630 e-value= 1.9e-29 fragment hit coverage= 37.50%, between model( 376 aa) positions 30; 170 length is 136aa with 5 gaps, 0 stops, absolute frame= Plus2"  
CDS 5545037..5545732  
/colour="255 0 0"  
/evidence=predicted  
/translation="FKHLHLGMInDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAShLSDkSLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKRQYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEGDEYLSKPQIAAGMIRQLQGMGFCVELVLADSLYGAAQTNFVNVLLEELKLPYILAIRSNHAVWLPAEQAVFAEPWQSFERTFSNGTTETTRYrQEIIYGqrhhQKRY"  
/note="IS4 e-value= 2.3e-13 fragment hit coverage= 51.23%, between model( 486 aa) positions 1; 249 length is 232aa with 27 gaps, 0 stops, absolute frame= Plus2"  
CDS 5545037..5546200  
/colour="255 0 0"  
/evidence=predicted  
/translation="FKHLHLGMInDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAShLSDkSLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKRQYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEGDEYLSKPQIAAGMIRQLQGMGFCVELVLADSLYGAAQTNFVNVLLEELKLPYILAIRSNHAVWLPAEQAVFAEPWQSFERTFSNGT-----TETTRYRQEIIYGQRHHQKRyWLLTDPQTLPENSTS-----YVMAAAPE----IKLDEIGDCYGFRTWIEYGLKQSKD-TLGWADFRMTHYEQIEKWWEIVMSAFLMVSFLFADVFDSCP-----VANQHFaQHPWDNQNGWKNNLVRLIIQPLISWNLLKSWLE--VFPIRALKKGFEOQLTSKMEAFC"  
/note="IS4 e-value= 1.2e-06 complete sequence hit coverage= 100%, between model( 486 aa) positions 1; 486 length is 388aa with 105 gaps, 0 stops, absolute frame= Plus2"  
CDS 5653406..5653864  
/colour="255 0 0"  
/evidence=predicted  
/translation="MTHRKLHSVWECKYHVVFVPKYRKGRIFYGQIRXNSGDFH-ELARHKKNVIEEGHLMVDHVHMLLSIPLKYSVSNVVGYVKGKSAIYIARELGNNSRNA-TGHKFWSRGYFVSTVG-RDEAMIRRYYIRHQGQEEQKLEQLNLFraXPKSPLRGSSNS"  
/note="IS200 e-value= 6.3e-51 complete sequence hit coverage= 100%, between model( 154 aa) positions 1; 154 length is 153aa with 3 gaps, 2 stops, absolute frame= Plus2"  
CDS 5653406..5653864  
/colour="255 0 0"  
/evidence=predicted  
/translation="MTHRKLHSVWECKYHVVFVPKYRKGRIFYGQIRXNSGDFH-ELARHKKNVIEEGHLMVDHVHMLLSIPLKYSVSNVVGYVKGKSAIYIARELGNNSRNA-TGHKFWSRGYFVSTVG-RDEAMIRRYYIRHQGQEEQKLEQLNLFraXPKSPLRGSSNS"  
/note="IS200 e-value= 5.1e-50 complete sequence hit coverage= 100%, between model( 154 aa) positions 1; 154 length is 153aa with 3 gaps, 2 stops, absolute frame= Plus2"

CDS 5653406..5653861  
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/evidence=predicted  
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/note="IS200\_IS605 e-value= 2.2e-50 complete sequence hit  
coverage= 100%, between model( 153 aa) positions 1; 153  
length is 152aa with 3 gaps, 2 stops, absolute frame=  
Plus2"  
CDS 5653406..5653861  
/colour="255 0 0"  
/evidence=predicted  
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HKFWSRGYFVSTVG-RDEAMIRRYIRHQGQEEQKLEQLNLFraXPKSPLRGSN"  
/note="IS200\_IS605 e-value= 5.6e-51 complete sequence hit  
coverage= 100%, between model( 153 aa) positions 1; 153  
length is 152aa with 3 gaps, 2 stops, absolute frame=  
Plus2"  
CDS 5653406..5653861  
/colour="255 0 0"  
/evidence=predicted  
/translation="-MTHRKLHSHVWECKYHVVFVPKYRKGRIGQIRXNSGDIHEL  
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HKFWSRGYFVSTVRDEAMIRRYIRHQGQEEQKLEQLNLfrAXPKSPLRGSN"  
/note="IS605 e-value= 6.9e-45 complete sequence hit  
coverage= 100%, between model( 152 aa) positions 1; 152  
length is 152aa with 2 gaps, 2 stops, absolute frame=  
Plus2"  
CDS 5653406..5653861  
/colour="255 0 0"  
/evidence=predicted  
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HKFWSRGYFVSTVRDEAMIRRYIRHQGQEEQKLEQLNLfrAXPKSPLRGSN"  
/note="IS605 e-value= 8.2e-45 complete sequence hit  
coverage= 100%, between model( 152 aa) positions 1; 152  
length is 152aa with 2 gaps, 2 stops, absolute frame=  
Plus2"  
CDS 5747213..5747476  
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/evidence=predicted  
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DTLCYRRQiSPETIQTILQAHEGSSLRGLSRITGVAYNTCVSVVR"  
/note="IS1\_ORF1 e-value= 1.7e-15 fragment hit coverage= 36.40%, between model( 239 aa) positions 1; 87 length is 88aa with 2 gaps, 0 stops, absolute frame= Plus2"  
CDS 5896091..5896333  
/colour="255 0 0"  
/evidence=predicted  
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EKLGISDAETVEQIRENPYLQYFLGFSEYRESAPFDASML"  
/note="IS5\_IS5 e-value= 2.6e-06 fragment hit coverage= 19.91%, between model( 422 aa) positions 23; 106 length is 81aa with 3 gaps, 0 stops, absolute frame= Plus2"  
CDS 5908769..5909158  
/colour="255 0 0"  
/evidence=predicted  
/translation="FFMDESGFSLVPCIPY-GWQPIG-----TYL-EIPT

RSSKRLNVLGFLSRRQGL--HAYTSEQTITSEVVShCIDTFFADV--ELPTVIVVDQA  
PIHTSQsiyEMKAWEAERG--ITLFELPSYSPHLNLIERLWQFMKYQWI"  
/note="IS630 e-value= 6.5e-11 fragment hit coverage= 39.10%, between model( 376 aa) positions 187; 333 length is 130aa with 21 gaps, 0 stops, absolute frame= Plus2"  
CDS 5942117..5942839  
/colour="255 0 0"  
/evidence=predicted  
/translation="----MAHLSPESFXCRATSEVVPSRST-----ISGPSILa  
risdLFPHCWRLGSIXIN---GLPYSPPGDRS-----DELRTL-----PTRQETSNT  
RIXAAAXCCRDXDXTDXSpKRTKSVLFRKKRHTLKQIIADRNTLEVICLSFGPG  
RRHDFQIFKGSGIHIHPNTESLQDSGYQGIAAYHANSYVPFKKPQHGELETSQREYNC  
ALSQERMGIEHINRSKISRILSERVNRRCRYALRCNLIAALYNHEL"  
/note="IS5\_ISL2 e-value= 1e-38 complete sequence hit coverage= 100%, between model( 260 aa) positions 1; 260 length is 241aa with 25 gaps, 6 stops, absolute frame= Plus2"  
CDS 5942438..5942839  
/colour="255 0 0"  
/evidence=predicted  
/translation="KKKRHTLKQIIADRNTLEVICLSFGPGRRHDFQIFKGSGIHIH  
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KISRILSERVNRRCRYALRCNLIAALYNHEL"  
/note="IS5\_ISL2 e-value= 2.1e-57 fragment hit coverage= 51.54%, between model( 260 aa) positions 127; 260 length is 134aa with 0 gaps, 0 stops, absolute frame= Plus2"  
CDS 6104879..6105265  
/colour="255 0 0"  
/evidence=predicted  
/translation="YADESGMDHRDEYDY-AYGPKGE-----RVYA-LKTG-  
RRSGRVNMIAALRAKQL--MAPFTIEGACNRTVFEIWLercLIPMLKPGQKLVI--DN  
ATFHKGGRIOELVEKAG--CEVWYLPYSPDLNKIERSWSWIKSIR"  
/note="IS630 e-value= 6.9e-14 fragment hit coverage= 38.83%, between model( 376 aa) positions 188; 333 length is 129aa with 20 gaps, 0 stops, absolute frame= Plus2"  
CDS 6243806..6244048  
/colour="255 0 0"  
/evidence=predicted  
/translation="VKLAELIPWESFESEYADQFSQ---TMGAPAKPFRVALGTLIIK  
EKLGISDAETVEQIRENPYLQYFLGFSEYRESAPFDASML"  
/note="IS5\_IS5 e-value= 2.6e-06 fragment hit coverage= 19.91%, between model( 422 aa) positions 23; 106 length is 81aa with 3 gaps, 0 stops, absolute frame= Plus2"  
CDS 6501464..6501685  
/colour="255 0 0"  
/evidence=predicted  
/translation="YASDLTAEQWELLEPLIPAAK-----PGGRPRTTDMCSVNLA  
ILYLVVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTW"  
/note="IS5\_IS1031 e-value= 3.3e-39 fragment hit coverage= 27.46%, between model( 295 aa) positions 20; 100 length is 74aa with 7 gaps, 0 stops, absolute frame= Plus2"  
CDS 6501473..6501685  
/colour="255 0 0"  
/evidence=predicted  
/translation="DLTAEQWELLEPLIPAAK-PGRPRT-TDMCSVNAILYLVVTG  
CQWRQLPHDFPCWSTVSYFRRWRDDGTW"  
/note="IS5\_IS427 e-value= 7.3e-19 fragment hit coverage= 24.66%, between model( 296 aa) positions 125; 197 length is 71aa with 2 gaps, 0 stops, absolute frame= Plus2"  
CDS 316002..316943

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/colour="255 0 0"
/evidence=predicted
/translation="TKNRXPMSYQIRNWSEYNAGLKQRGSVTFWLEQS--AIVHWLET
TPRQKRGASLTYSDETAISTFETVKC1YGLAGRQTEGFLNSLFELMGIELPVCVDHSTVS
RRKGQLSISLPVIPKQGAIHVVIDSTGVKVYG-----EGEWKTRQHGVS-K
RRTWRKLHLSVDESTGEILTGVVTTNDVQDGEVFEDLLEGIDD----EIEQVSAD-G
AYDQSHCYDALMERNATAAIPPRKNA-----KIWQHGNC--NApphpRDQ
NLRAIRKQGRKRWKQAHYHRRSLAETTMFRFKTIFGGQVRSRNFDNQATELLLQCAA
LN-RM1QIAKPETVWVE"
/note="IS5_IS903 e-value= 1.1e-96 complete sequence hit
coverage= 100%, between model( 347 aa) positions 1; 347
length is 314aa with 37 gaps, 1 stops, absolute frame=
Plus3"
CDS
316002..316943
/colour="255 0 0"
/evidence=predicted
/translation="TKNRXPMSYQIRNWSEYNAGLKQRGSVTFWLEQS--AIVHWLET
TPRQKRGASLTYSDETAISTFETVKC1YGLAGRQTEGFLNSLFELMGIELPVCVDHSTVS
RRKGQLSISLPVIPKQGAIHVVIDSTGVKVYG-----EGEWKTRQHGVS-K
RRTWRKLHLSVDESTGEILTGVVTTNDVQDGEVFEDLLEGIDD----EIEQVSAD-G
AYDQSHCYDALMERNATAAIPPRKNA-----KIWQHGNC--NApphpRDQ
NLRAIRKQGRKRWKQAHYHRRSLAETTMFRFKTIFGGQVRSRNFDNQATELLLQCAA
LN-RM1QIAKPETVWVE"
/note="IS5_IS903 e-value= 2.2e-96 complete sequence hit
coverage= 100%, between model( 347 aa) positions 1; 347
length is 314aa with 37 gaps, 1 stops, absolute frame=
Plus3"
CDS
469320..469814
/colour="255 0 0"
/evidence=predicted
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HQIVYVDEAGIDNRADYPY-GYCPVG-----QRFYD-LKSG-KRTERVSFIA
ALKEGQL--FSPMTFEGSCNRLFEAWLQOSLI-SQLQLgdVIVIDNASFHGQRIEE
IVAEAG--CEIWYLPSYSPDLNKIERWWFVLKN"
/note="IS630 e-value= 3e-16 fragment hit coverage=
50.80%, between model( 376 aa) positions 140; 330 length
is 165aa with 28 gaps, 0 stops, absolute frame= Plus3"
CDS
471168..471305
/colour="255 0 0"
/evidence=predicted
/translation="WQTDGWEGYSRQLPNE---TIHHVSKALTQRLERTNGILRQQAG
RWHRR"
/note="IS1_ORF2 e-value= 3.3e-13 fragment hit coverage=
20.68%, between model( 237 aa) positions 164; 212 length
is 46aa with 3 gaps, 0 stops, absolute frame= Plus3"
CDS
516039..516734
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMISDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAS
hLSDkrLDIILKILDGRRLLILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK
PQIAAGMIROLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP
AEQAVFAEPWQSFERTFSNGTTETRYrQEIIYGqrhhQKRY"
/note="IS4 e-value= 4.7e-14 fragment hit coverage=
51.23%, between model( 486 aa) positions 1; 249 length is
232aa with 27 gaps, 0 stops, absolute frame= Plus3"
CDS
516039..517166
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMISDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAS

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hLSDKRLDIILKILDGRRILLID-----ETGDKKGKSTDYVKR  
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 PQIAAGMIRQLQGMGFCELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAWLP  
 AEQAVFAEPWQSFERTFSNGT-----TETRYR  
 QEIIYGQRHHQKRyWLLTDPQTLPENSTS-----YVMAA  
 APE----IKLDEIGDCYGFRTWIEYGLKQSKD-TLGWADFRMTHYEQIEKWWEIVMSA  
 FLMVSLFADVFNDS-----CPVAHQHFAQHPwWDNQNG  
 WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"  
 /note="IS4 e-value= 9.9e-07 complete sequence hit  
 coverage= 100%, between model( 486 aa) positions 1; 486  
 length is 376aa with 117 gaps, 0 stops, absolute frame=  
 Plus3"

CDS 666744..667439  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS  
 hLSDKRLDIILKILDGRRILLID-----ETGDKKGKSTDYVKR  
 QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK  
 PQIAAGMIRQLQGMGFCELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAWLP  
 AEQAVFAEPWQSFERTFSNGTTETRYrQEIIYGqrhhQKRY"  
 /note="IS4 e-value= 4.7e-14 fragment hit coverage=  
 51.23%, between model( 486 aa) positions 1; 249 length is  
 232aa with 27 gaps, 0 stops, absolute frame= Plus3"

CDS 666744..667871  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS  
 hLSDKRLDIILKILDGRRILLID-----ETGDKKGKSTDYVKR  
 QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK  
 PQIAAGMIRQLQGMGFCELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAWLP  
 AEQAVFAEPWQSFERTFSNGT-----TETRYR  
 QEIIYGQRHHQKRyWLLTDPQTLPENSTS-----YVMAA  
 APE----IKLDEIGDCYGFRTWIEYGLKQSKD-TLGWADFRMTHYEQIEKWWEIVMSA  
 FLMVSLFADVFNDS-----CPVAHQHFAQHPwWDNQNG  
 WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"  
 /note="IS4 e-value= 9.9e-07 complete sequence hit  
 coverage= 100%, between model( 486 aa) positions 1; 486  
 length is 376aa with 117 gaps, 0 stops, absolute frame=  
 Plus3"

CDS 690405..690542  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="WQTDGWEGYARQLPDE---VVHEVSKALTQRLERTNGIVRQQTG  
 RWHRR"  
 /note="IS1\_ORF2 e-value= 1.8e-11 fragment hit coverage=  
 20.68%, between model( 237 aa) positions 164; 212 length  
 is 46aa with 3 gaps, 0 stops, absolute frame= Plus3"

CDS 972294..973070  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="PYXXXEKAXISLVLEASKNAXISLLSXGwVQAPTTIRIAGLARL  
 IAWA--VCFANPASSXEL--PLYSGSFSLSI-----SKYRTGCLERLFEKXVKL  
 SRYXsVNTQTLDRTXRAMPTAYDSLTTLQWELLEPLIPAAKP-GGRPRT-TDMLSVL  
 NAIFYLVVTGCQWRQLPHDFPCWSTVYSYFRRWRDDGTWSQINEHLRMQVRVSE---  
 -----DRHPSPSAICDAQSvvgnpRCHLIGFDGGKM  
 VKGRKRHVLDLGLVLMVMVTAANIS"  
 /note="IS5\_IS427 e-value= 8.6e-07 complete sequence hit  
 coverage= 100%, between model( 296 aa) positions 1; 296  
 length is 259aa with 44 gaps, 10 stops, absolute frame=  
 Plus3"

CDS 972543..973412  
/colour="255 0 0"  
/evidence=predicted  
/translation="EKXVKLSRYXSNTQTLDRXramptaYDSLTTLQWELLEPLI  
PAAKPG----GRPRTTDML-----SVLNAIFYLVVTGCQWRQ  
--LPHDFPCWSTVSYFRRWRDDGTWSQINEHLMQVRVSED--RHPSPSAAICDAO  
SVK-----VGNpRchLIGFD-----GGKM-  
-----VKGRKRHVLD-TL  
GLVLMVMVTAANISDQRGAK-----ILFWKAQRQGASLSRL  
VR----IWADAGYQGQALMKWVMDRFQYVLEVVKRSNDNLAGFQVIPKRWIVERTFGWL  
LWSRRLNKDYEVLTRTAEALVYVAMIRLMVRRLAQEHX"  
/note="IS5\_IS5 e-value= 1.8e-09 complete sequence hit  
coverage= 100%, between model( 422 aa) positions 1; 422  
length is 290aa with 140 gaps, 4 stops, absolute frame=  
Plus3"

CDS 972582..973433  
/colour="255 0 0"  
/evidence=predicted  
/translation="TQTLDRXRAM----PTAYDSLTTLQWELLEPLI PAAK---  
---PGGRPRTTDMLSVLNAIFYLVVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWSQ  
INEHLMQVRVSED RHPSPSAAICDAO QSVKVGNPRCH-LIGFDGGKMKVGRKRHVLD  
TLGLVLMVMVTAANISDQR-GAKILFWKAQRQGas1SRLVRIWADAGYQGQALMKWVM  
DRFQYVLEVVKRSNDNLAGFQVIPKRWIVERTFGWLLWSRRLNKDYEVLTRTAEALVYV  
AMIRLMVRRLAQEHXNFNSNLX"  
/note="IS5\_IS1031 e-value= 1.8e-111 complete sequence hit  
coverage= 100%, between model( 295 aa) positions 1; 295  
length is 284aa with 14 gaps, 3 stops, absolute frame=  
Plus3"

CDS 972624..973433  
/colour="255 0 0"  
/evidence=predicted  
/translation="YDSLTTLQWELLEPLI PAAK-----PGGRPRTTDMLSVLNA  
IFYLVVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWSQINEHLMQVRVSED RHPSP  
SAAICDAO QSVKVGNPRCH-LIGFDGGKMKVGRKRHVLD TLGLVLMVMVTAANISDQR  
-GAKILFWKAQRQGas1SRLVRIWADAGYQGQALMKWVMDRFQYVLEVVKRSNDNLAGF  
QVIPKRWIVERTFGWLLWSRRLNKDYEVLTRTAEALVYVAMIRLMVRRLAQEHXNFNSN  
SLX"  
/note="IS5\_IS1031 e-value= 1.2e-113 fragment hit  
coverage= 93.56%, between model( 295 aa) positions 20;  
295 length is 270aa with 9 gaps, 2 stops, absolute frame=  
Plus3"

CDS 972633..972872  
/colour="255 0 0"  
/evidence=predicted  
/translation="DLTTLQWELLEPLI PAAK-PGGRPRT-TDMLSVLNAIFYLVVTG  
CQWRQLPHDFPCWSTVSYFRRWRDDGTWSQINEHLM"  
/note="IS5\_IS427 e-value= 2e-19 fragment hit coverage= 27.70%, between model( 296 aa) positions 125; 206 length is 80aa with 2 gaps, 0 stops, absolute frame= Plus3"

CDS 1016775..1017812  
/colour="255 0 0"  
/evidence=predicted  
/translation="PMIKIDFTAEI IQQLNYERYHHPHPRVQRRMEVLYLKSQGLSH  
QICQLCQISRPTLA KTLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH  
PP-----RTSAEAQAVIEQLTGIKRSPTQIKAFLKRIGCRYRKVGYVPGKSSL  
-EKIEEQEQRHTRLEPLeeAQRQERLVFFVDAAHFVHRAYLGF-VWCITRI-----  
-----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL  
DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPYSRSRHLNLIERLWRFVRKE  
CLYSKYADFPAGAIQQCIDQCNGEHKAKLTLLSLKFQSFKK"  
/note="IS630 e-value= 3.1e-22 complete sequence hit

coverage= 100%, between model( 376 aa) positions 1; 376  
 length is 346aa with 33 gaps, 0 stops, absolute frame=  
 Plus3"

CDS 1016775..1017812  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="PMIKIDFTAEEIQQLNYERYHHPHPRVQRRMEVLYLKSQGLSHT  
 QICQLCQISRPTLAKTLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH  
 PP-----RTSAEAQAVIEQLTGIKRSPTQIKAFKLKRIGCRYRKVGYVPGKSSL  
 -EKIEEQEQRHTRLEPLEeAQRQERLVFFFDAAHFVHRAYLGF-VWCITRI----  
 -----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL  
 DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPYSRHLNLIERLWRFVRKE  
 CLYSKYADFPAFKGAIQQCIDOCNGEHAKLTTLLSLKFQSFKK"  
 /note="IS630 e-value= 3.5e-21 complete sequence hit  
 coverage= 100%, between model( 376 aa) positions 1; 376  
 length is 346aa with 33 gaps, 0 stops, absolute frame=  
 Plus3"

CDS 1016835..1016993  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="HHPHPRVQRRMEVLYLKSQGLSHTQICQLCQISRPTLAKTLRQY  
 QQGGIEGLK"  
 /note="IS481 e-value= 3.7e-09 fragment hit coverage=  
 15.10%, between model( 351 aa) positions 1; 53 length is  
 53aa with 0 gaps, 0 stops, absolute frame= Plus3"

CDS 1099857..1100243  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="YADESGMDHRDEYDY-AYGPKGE-----RVYA-LKTG-  
 RRSGRVNMIAALRAKQL--MAPFTIEGACNRTVFELwLERCLIPv1KPGQKLVI--DN  
 ATFHKGQIQELVEKAG--CEVWYLPPYSPDLNKIERSWSWIKSIR"  
 /note="IS630 e-value= 1.1e-13 fragment hit coverage=  
 38.83%, between model( 376 aa) positions 188; 333 length  
 is 129aa with 20 gaps, 0 stops, absolute frame= Plus3"

CDS 1100496..1101191  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAS  
 hLSDkRLDIILKILDGRRILLID-----ETGDCKKGKSTDYVKR  
 QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK  
 PQIAAGMIROLQGMGFCVELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
 AEQAVFAEPWQSFERTFSNGTTETRYrQEIIYGqrhhQKRY"  
 /note="IS4 e-value= 4.7e-14 fragment hit coverage=  
 51.23%, between model( 486 aa) positions 1; 249 length is  
 232aa with 27 gaps, 0 stops, absolute frame= Plus3"

CDS 1100496..1101623  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAS  
 hLSDkRLDIILKILDGRRILLID-----ETGDCKKGKSTDYVKR  
 QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK  
 PQIAAGMIROLQGMGFCVELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
 AEQAVFAEPWQSFERTFSNGT-----TETRYR  
 QEIIYGQRHHQKRYWLTTDPQTLPENSTS-----YVMAA  
 APE----IKLDEIGDCYGFRTWIEYGLQSKD-TLGWADFRMTHYEQIEKWWEIVMSA  
 FLMVSLFADFVNDS-----CPVAHQHFAQHPwWDNQNG  
 WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"  
 /note="IS4 e-value= 9.9e-07 complete sequence hit  
 coverage= 100%, between model( 486 aa) positions 1; 486  
 length is 376aa with 117 gaps, 0 stops, absolute frame="

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Plus3"
CDS 1211556..1212239
/colour="255 0 0"
/evidence=predicted
/translation="LHLXYFRRQYOCGGQHIHKNGHRR-GKQNHICVACGR----QFL
STYSKRGysdwTKRLCLRMVNGMGLQGIERVIGVAHTTVIRWVQQV--GVLLPDAYD
PDDIPQVGELDELETFGQKRKNVWIWTVVDFHPGILGWVVGDSAETFRPLWQAIV
CWQ-CFFWVSDGNPVYPGFIPEG---DQIVSKTYMTRVEGENTRLRHYLARLHRKTL
CYSKSVDMLKHSIRLLI-HYLKF"
/note="IS1_ORF2      e-value= 4.1e-24 complete sequence hit
coverage= 100%, between model( 237 aa) positions 1; 237
length is 228aa with 13 gaps, 1 stops, absolute frame=
Plus3"
CDS 1211586..1212233
/colour="255 0 0"
/evidence=predicted
/translation="QCGGQH-IHKNGHRR-GKQNHICVACGRQFL--STYSKRGYSDW
TKRLCLRMVNGMGLQGIERVIGVAHTTVIRWVQQVGVLLPDAYDPDD----IP--
-QVGELETFVGQKRKNVWIW-TVVDHFHPG--ILGWVVGDSAETFRPLWqaIVC
WQCFFWVSDGNPVYPgFIPEGDQIVSKTYMTRVEGENTRLRHYLARLHRKTLCSKSV
DMLKHSIRLL---IHYL"
/note="IS1_ORF1      e-value= 5.5e-39 fragment hit coverage=
96.23%, between model( 239 aa) positions 10; 239 length
is 216aa with 19 gaps, 0 stops, absolute frame= Plus3"
CDS 1211586..1212233
/colour="255 0 0"
/evidence=predicted
/translation="-----QCGGQH-IHKNGHRR-GKQNHICVACGRQFL--ST
YSKRGYSDWTKRLCLRMVNGMGLQGIERVIGVAHTTVIRWVQQVGVLLPDAYDPDD-
----IP---QVGELETFVGQKRKNVWIW-TVVDHFHPG--ILGWVVGDSAETF
RPLWqaIVCWQCFFWVSDGNPVYPgFIPEGDQIVSKTYMTRVEGENTRLRHYLARLHR
KTLCSKSVDMLKHSIRLL---IHYL"
/note="IS1_ORF1      e-value= 5.6e-36 complete sequence hit
coverage= 100%, between model( 239 aa) positions 1; 239
length is 216aa with 28 gaps, 0 stops, absolute frame=
Plus3"
CDS 1211838..1212239
/colour="255 0 0"
/evidence=predicted
/translation="DPDDIPQVGELDELETFGQKRKNVWIWTVVDFHPGILGWVVG
DHSAETFRPLWQAIVCWQ-CFFWVSDGNPVYPGFIPEG---DQIVSKTYMTRVEGEN
TRLRHylarLHRKTLCSKSVDMLKHSIRLLI-HYLKF"
/note="IS1_ORF2      e-value= 1.9e-31 fragment hit coverage=
59.07%, between model( 237 aa) positions 98; 237 length
is 134aa with 6 gaps, 0 stops, absolute frame= Plus3"
CDS 1474827..1475525
/colour="255 0 0"
/evidence=predicted
/translation="RMAYPSSrSLKCRASSKVVSPXSTIGGSS-----ILAGIS
DLFPYCWLGSIXINCLPYCpGRNRSDELRTSLTWSEISATR-----VXATG
CRCDCDXNAHXTSPEKTSVLF---REKKRHTLKCOIIADRNTLEIICLSFGPGRR
HDFQIFKVSGIHIHPNTESLQDSGYQGIAAYHANSYVPFKKSQHSELTSLQREYNRAL
SQERMGIEHIK-----SQPEDFQNSVGApxSSSSLHAAVXL"
/note="IS5_ISL2      e-value= 5e-10 complete sequence hit
coverage= 100%, between model( 260 aa) positions 1; 260
length is 233aa with 31 gaps, 7 stops, absolute frame=
Plus3"
CDS 1475154..1475444
/colour="255 0 0"
/evidence=predicted

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/translation="KKRHTLKCQIIADRNTLEIICLSFGPGRRHDFQIFKVSGIHIHP
NTESLQDSGYQGIAAYHANSYVPFKKSQHSELTSLQREYNRALSQERMGIEHI"
/note="IS5_ISL2      e-value= 4.6e-35 fragment hit coverage=
37.31%, between model( 260 aa) positions 128; 224 length
is 97aa with 0 gaps, 0 stops, absolute frame= Plus3"
CDS      1500237..1500374
/colour="255 0 0"
/evidence=predicted
/translation="WQTDGWEGYARQLPDE---VVHEVSKALTQRLERTNGIVRQQTG
RWHRR"
/note="IS1_ORF2      e-value= 1.8e-11 fragment hit coverage=
20.68%, between model( 237 aa) positions 164; 212 length
is 46aa with 3 gaps, 0 stops, absolute frame= Plus3"
CDS      1586793..1587056
/colour="255 0 0"
/evidence=predicted
/translation="LFYFLMOCPLCGHPK-THKHGKTSKGSQRYRCPHCQQTFS-Etf
DTLCYRRQisPETIQTILQAHVEGSSLRGLSRITGVAYNTCVSVVR"
/note="IS1_ORF1      e-value= 1.7e-15 fragment hit coverage=
36.40%, between model( 239 aa) positions 1; 87 length is
88aa with 2 gaps, 0 stops, absolute frame= Plus3"
CDS      2912997..2913938
/colour="255 0 0"
/evidence=predicted
/translation="TKNRXPMSYQIRNWSEYNAGLKQRGSVTFWLEQS--AIVHWLET
TPRQKRGASLTYSDETAISTFETVKC1YGLAGRQTEGFLNSLFELMGIELPVCVDHSTVS
RRKGQLSISLPVIPKQGAIHVVIDSTGVKVG-----EGEWKTRQHGVS-K
RRTWRKLHLSVDESTGEILTGVVTTNDVQDGEVFEDLLEGIDD-----EIEQVSAD-G
AYDQSHCYDALMERNATAAIIPPRKNA-----KIWQHGNC--NApphpRDQ
NLRAIRKQGRKRWKQAHYHRRSLAETTMFRFKTIFGGQVRSRNFDNQATELLLQCAA
LN-RMIQIAKPETVWVE"
/note="IS5_IS903      e-value= 1.1e-96 complete sequence hit
coverage= 100%, between model( 347 aa) positions 1; 347
length is 314aa with 37 gaps, 1 stops, absolute frame=
Plus3"
CDS      2912997..2913938
/colour="255 0 0"
/evidence=predicted
/translation="TKNRXPMSYQIRNWSEYNAGLKQRGSVTFWLEQS--AIVHWLET
TPRQKRGASLTYSDETAISTFETVKC1YGLAGRQTEGFLNSLFELMGIELPVCVDHSTVS
RRKGQLSISLPVIPKQGAIHVVIDSTGVKVG-----EGEWKTRQHGVS-K
RRTWRKLHLSVDESTGEILTGVVTTNDVQDGEVFEDLLEGIDD-----EIEQVSAD-G
AYDQSHCYDALMERNATAAIIPPRKNA-----KIWQHGNC--NApphpRDQ
NLRAIRKQGRKRWKQAHYHRRSLAETTMFRFKTIFGGQVRSRNFDNQATELLLQCAA
LN-RMIQIAKPETVWVE"
/note="IS5_IS903      e-value= 2.2e-96 complete sequence hit
coverage= 100%, between model( 347 aa) positions 1; 347
length is 314aa with 37 gaps, 1 stops, absolute frame=
Plus3"
CDS      2982312..2983067
/colour="255 0 0"
/evidence=predicted
/translation="LQANLQTHAPRMAHLSPKSLXCRATSKVPPRSTIsgpSILARI
SDLFPHCWRLGRFXIN----GLPYSPAGR---ECSDELRTL-----PTRQETSNTRI
XATXCCRDGCDXTDXTsSKRTKSVLFRKKRHTLKQIIIANRSTLEIICLNGKGRR
HDFQIFKVSGIHIHPNTESLQDSGYQGITAYHSNSYVPFKKPQHGETSLQREYNRAL
SQERMGIEHINRSLKIFRILSERVNRRRRYALRCNLIAALYNHEL"
/note="IS5_ISL2      e-value= 4.5e-45 complete sequence hit
coverage= 100%, between model( 260 aa) positions 1; 260
length is 252aa with 12 gaps, 6 stops, absolute frame=

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Plus3"
CDS 2982666..2983067
/colour="255 0 0"
/evidence=predicted
/translation="KKKRHTLKCQIIANRSTLEIICLNFGKGRHHDFQIFKVSGIHIH
PNTESLQDSGYQGITAYHSNSYVPFKPQHGE LTSI QREYNRAL S QERMGIEHINRSL
KIFRILSER YRNRR RRYALRCNLIAALYNHEL"
/note="IS5_ISL2 e-value= 5.1e-63 fragment hit coverage=
51.54%, between model( 260 aa) positions 127; 260 length
is 134aa with 0 gaps, 0 stops, absolute frame= Plus3"
CDS 3307083..3307769
/colour="255 0 0"
/evidence=predicted
/translation="DELIGENPQP EDiLGESGLLKRLSKRLVERALAGELTHHLQSS
NDQS-GDeNSNGPRNSRN GYSKKT VQSEQG-EMDLSIPDR DCG-EFEPV LVPKGQRR
A-GLDEKII ALYARGMTT RDIR AQLVELYG--ANISEAL ISDVTNSVMEEVKDWR SRP
LDEV--YPIVYLDAL YVN IKVNGQVSK RAVYVAL A VTVEGN KELLGLWIGAAerEGAK
FWLSVLTDLKNRGTQDILM"
/note="IS256 e-value= 1.9e-79 fragment hit coverage=
56.59%, between model( 410 aa) positions 1; 232 length is
229aa with 8 gaps, 0 stops, absolute frame= Plus3"
CDS 3307083..3309647
/colour="255 0 0"
/evidence=predicted
/translation="DELIGENPQP EDiLGESGLLKRLSKRLVERALAGELTHHLQSS
NDQS-GDeNSNGPRNSRN GYSKKT VQSEQG-EMDLSIPDR DCG-EFEPV LVPKGQRR
A-GLDEKII ALYARGMTT RDIR AQLVELYG--ANISEAL ISDVTNSVMEEVKDWR SRP
LDEV--YPIVYLDAL YVN IKVNGQVSK RAVYVAL A VTVEGN KELLGLWIGAAerEGAK
FWLSVLTDLKNRGTQDILmglfrvlckrsriqthqetvrc lerk klpiesmn cxmn ss
ertlnrkifwanqdclndsanaxwneplqvnxlitcsnpptisqv m rilmapeivamv
trkrpsslnkerwtyrflvtvaasls ls wclkas dasq gsmrkss p ymlgaxppvife
pnwwscm gpis lklxlvtspiaswkrsktgvqgrwmrcirlsilmrcxtks m vksa
selsmslwqxlwratrncwdy gxeplnereq nsgfrcs qtlk ielrisxllavmdsk
vflkrlsrstlrprcrf vlsilfviaf amc rgrkvepxlq tss pftkrplwks lrlrw
mhlp ingtrrilalaksgydigimlprcf ntqwpsvr l stppmpls rsta h xer xl rp
krfslmks l stnx cf xrx g ifrs dgp dfxigrrrcp ilfc s qhd stieytaaytki
xtlSIA CCDGLKGFPQAIESVYPOTQVQVCIVHLIRNSLRHVPW KESRAVAADLKPI
YQAATLE-ESEAALDAFAH-KWDETYPG ISQIWI RHD NVAPLFQYPMAIRKVIYTTN
AIESLNRSLRKVIKTKAVFPNEESVYKLMFLAMRNISKR-WTRPILNWKAALSHFAIL
FPTRFNYXIH"
/note="IS256 e-value= 4.1e-83 complete sequence hit
coverage= 100%, between model( 410 aa) positions 1; 410
length is 855aa with 11 gaps, 1 stops, absolute frame=
Plus3"
CDS 3309117..3309647
/colour="255 0 0"
/evidence=predicted
/translation="LIACCDGLKGFPQAIESVYPOTQVQVCIVHLIRNSLRHVPW KES
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AIESLNRSLRKVIKTKAVFPNEESVYKLMFLAMRNISKR-WTRPILNW
KAALSHFAILFPTRFNYXIH"
/note="IS256 e-value= 5.1e-77 fragment hit coverage=
43.90%, between model( 410 aa) positions 231; 410 length
is 177aa with 3 gaps, 1 stops, absolute frame= Plus3"
CDS 3315393..3316334
/colour="255 0 0"
/evidence=predicted
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TPRQKRGASLTYS DTAISTFETVKC IYGLAGRQTEGFLNSLFELMGIELPVCDHSTVS
RRKGQLSISLPVIPKQGAIHVVIDSTGIKVYG-----EGEWKTRQHGVS-K

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RRTWRKLHLSVDESTGEILTGVVTTNDVQDGEVFEDLLEGIDD-----EIEQVSAD-G  
 AYDQSHCYDALMERNATAIIPPRKNA-----KIWQHGNC--NApphpRDO  
 NLRAIRKQGRKRWKQAHYHRRSLAETTMFRFKTIFGGQVRSRNFDNQATELLLQCAA  
 LN-RMIQIAKPETVWVE"  
 /note="IS5\_IS903 e-value= 9.4e-98 complete sequence hit  
 coverage= 100%, between model( 347 aa) positions 1; 347  
 length is 314aa with 37 gaps, 1 stops, absolute frame=  
 Plus3"  
 CDS 3315393..3316334  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="TKNRXPMSYQIRNWSEYNAGLKQRGSVTFWLEQS--AIVHWLET  
 TPRQKRGASLTYSDTAISTFETVKC1YGLAGRQTEGFLNSLFELMGIELPVCVDHSTVS  
 RRKGQLSISLPVIPKQGAIHVVIDSTGIKVYG-----EGEWKTRQHGVS-K  
 RRTWRKLHLSVDESTGEILTGVVTTNDVQDGEVFEDLLEGIDD-----EIEQVSAD-G  
 AYDQSHCYDALMERNATAIIPPRKNA-----KIWQHGNC--NApphpRDO  
 NLRAIRKQGRKRWKQAHYHRRSLAETTMFRFKTIFGGQVRSRNFDNQATELLLQCAA  
 LN-RMIQIAKPETVWVE"  
 /note="IS5\_IS903 e-value= 1.7e-97 complete sequence hit  
 coverage= 100%, between model( 347 aa) positions 1; 347  
 length is 314aa with 37 gaps, 1 stops, absolute frame=  
 Plus3"  
 CDS 3758064..3758450  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="YADESGMDHRDEYDY-AYGPKGE-----RVYA-LKTG-  
 RRSGRVNMIAALRAKQL--MAPFTIEGACNRTVFELwLERCLIPv1KPGQKLVI--DN  
 ATFHKGQQIQLVEKAG--CEVWYLPYSPDLNKIERSWSWIKSIR"  
 /note="IS630 e-value= 1.1e-13 fragment hit coverage=  
 38.83%, between model( 376 aa) positions 188; 333 length  
 is 129aa with 20 gaps, 0 stops, absolute frame= Plus3"  
 CDS 4200300..4200518  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="RIRFYI1PKHTSXLNQIECWFSILVRRLIRRGNFTSTDDLQQRI  
 LDFIEYFNhtMAKPFQWQFKGFTP亨GXLM"  
 /note="IS630 e-value= 5.4e-08 fragment hit coverage=  
 19.15%, between model( 376 aa) positions 305; 376 length  
 is 73aa with 0 gaps, 2 stops, absolute frame= Plus3"  
 CDS 4200348..4200458  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="IECWFSILVRRLIR--RGNFTSTDDLQQRILDFIEYFNH"  
 /note="IS3\_IS150\_ORF2 e-value= 4.8e-09 fragment hit  
 coverage= 10.03%, between model( 389 aa) positions 329;  
 367 length is 37aa with 2 gaps, 0 stops, absolute frame=  
 Plus3"  
 CDS 4250727..4251422  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAS  
 hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR  
 QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK  
 PQIAAGMIRQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
 AEQAVFAEPWQSFERTFSNGTTETRYrQEIIYGqrhhQKRY"  
 /note="IS4 e-value= 4.7e-14 fragment hit coverage=  
 51.23%, between model( 486 aa) positions 1; 249 length is  
 232aa with 27 gaps, 0 stops, absolute frame= Plus3"  
 CDS 4250727..4251854  
 /colour="255 0 0"

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/evidence=predicted
/translation="FKHLHLGMI sDIKRKSLPAIARAVGLENHQLHHFLSESPWVAS
hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK
PQIAAGMIRQLQGMGFCFLVLA D SLYGEAQTNFVNLEELKLPYILA IRSN HAVWLP
AEQAVFAEPWQS FERTFSNGT-----TETRYR
QEIIYGQRHHQKRyWLLTDPQTL PENSTS-----YVMAA
APE----IKLDEIGDCYGFRTWIEYGLKQSKD-TLGWADFRMTHYEQIEKWWEIVMSA
FLMVS LFADVF NDS-----CPVAHQHFAQHPwWDNQNG
WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"
/note="IS4 e-value= 9.9e-07 complete sequence hit
coverage= 100%, between model( 486 aa) positions 1; 486
length is 376aa with 117 gaps, 0 stops, absolute frame=
Plus3"
CDS 4281402..4281956
/colour="255 0 0"
/evidence=predicted
/translation="HLSKTTQVNPKNQGLNINKVACSSQSW-----NDCLLMPV
SLKFFPLSLXFILLISEYMNSGL-----ISLMPKHMKHLR-----LFFT VYPE
XspACVKQHDTKQRPHEPRQA-----VLLLSLRXQIKITLX-----
-----RLLYVPLKKPQQGELTPLEXEYNRALSO
ERMGIEHINRSLKIFRILSERYSRSR RYALRCNLIAAIYNYEL"
/note="IS5_ISL2 e-value= 3.9e-10 complete sequence hit
coverage= 100%, between model( 260 aa) positions 1; 260
length is 185aa with 77 gaps, 5 stops, absolute frame=
Plus3"
CDS 4281750..4281956
/colour="255 0 0"
/evidence=predicted
/translation="YVPLKKPQQGELTPLEXEYNRALSOERMGIEHINRSLKIFRILS
ERYRSRSRRYALRCNLIAAIYNYEL"
/note="IS5_ISL2 e-value= 3.1e-31 fragment hit coverage=
26.54%, between model( 260 aa) positions 192; 260 length
is 69aa with 0 gaps, 1 stops, absolute frame= Plus3"
CDS 5056764..5056982
/colour="255 0 0"
/evidence=predicted
/translation="RIRFVYIPKHTSWLNQIECWFSILVRRLIRRGNFTSKDDLQ QRI
LEFIEYFNhtMAKPFWQFKGFQPR LXLM"
/note="IS630 e-value= 4e-10 fragment hit coverage=
19.15%, between model( 376 aa) positions 305; 376 length
is 73aa with 0 gaps, 1 stops, absolute frame= Plus3"
CDS 5056812..5056922
/colour="255 0 0"
/evidence=predicted
/translation="IECWFSILVRRLIR--RGNFTSKDDLQ QRI LEFIEYFNH"
/note="IS3_IS150_ORF2 e-value= 2e-08 fragment hit
coverage= 10.03%, between model( 389 aa) positions 329;
367 length is 37aa with 2 gaps, 0 stops, absolute frame=
Plus3"
CDS 5147340..5148377
/colour="255 0 0"
/evidence=predicted
/translation="PMIKIDFTAEEIQQLNYERYHHPHPRVQRRMEVLYLKSQGLSHT
QICQLCQISRPTLAKTLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH
PP-----RTSAEAQAVIEQLTGIKRSPTQIKAFKLKRIGCRYRKVGYVPGKSSL
-EKIEEQEQRHTRLEPLeeAQRQERLVFFFVDAAHFVHRAYLGF-VWCITRI-----
FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLAKLALL
DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPYSPHLNLIERLWRFVRKE
CLYSKYYADFP AFGAIQOCIDQCN GEHKAKLTLLSLKFQSFKK"

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/note="IS630 e-value= 6.7e-25 complete sequence hit
coverage= 100%, between model( 376 aa) positions 1; 376
length is 346aa with 33 gaps, 0 stops, absolute frame=
Plus3"
CDS
5147340..5148377
/colour="255 0 0"
/evidence=predicted
/translation="PMIKIDFTAEEIQQLNYERYHHPPRVQRRMEVLYLKSQGLSHT
QICQLCQISRPTLAKTLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH
PP-----RTSAEAQAVIEQLTGIKRSPQTQIKAFLKRIKGCRYRKVGYVPGKSSLP
-EKIEEQEQRHTRLEPLEeAQRQERLVFFDAAHFVHRAYLGF-VWCITRI-----
FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL
DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSYSPLHNLIERLWRFVRKE
CLYSKYYADFPFAFKGAIQQCIDQCNGEHKAKLTLLSLKFQSFKK"
/note="IS630 e-value= 4.9e-24 complete sequence hit
coverage= 100%, between model( 376 aa) positions 1; 376
length is 346aa with 33 gaps, 0 stops, absolute frame=
Plus3"
CDS
5147400..5147558
/colour="255 0 0"
/evidence=predicted
/translation="HHPPPRVQRRMEVLYLKSQGLSHTQICQLCQISRPTLAKTLRQY
QQGGIEGLK"
/note="IS481 e-value= 3.7e-09 fragment hit coverage=
15.10%, between model( 351 aa) positions 1; 53 length is
53aa with 0 gaps, 0 stops, absolute frame= Plus3"
CDS
5209563..5210690
/colour="255 0 0"
/evidence=predicted
/translation="PFASIIIEHFSDDPRAAHRIEYLEDIIITLCAVLCGADNWV
EVANYGRSKAQWLKQWIALPNG-----VPSHDTFEWFARLKPQQLQOCFLNWTQAI
YQLSAGE-LIAIDGKTLRGAIAPGEQCSLIHMVSAWSHNRLVLGQRTVDEKSNEITA
IPELLKVLELEG-ALVSIDAMGCQTAIAETIIEGQG-DYVLALKGNQGDLYNDVVQLF
dhaCQTQFQGIEHDSYQTVKKGRIEHRTYWTMGQTDYLLGAE-RWAQLKSIGCVES
CRRQPGHPG---TLQRRYYLLSIESDAQR---FADAVRSHWGIENQLHWILDVGFRED
KLRACQGCSAQNLSVIRHIAANLLOQESTAKCGVKAKRLKAGWDDNYLVKILSVAAKG
"
/note="ISAs1 e-value= 2.4e-150 complete sequence hit
coverage= 100%, between model( 389 aa) positions 1; 389
length is 376aa with 16 gaps, 0 stops, absolute frame=
Plus3"
CDS
5209563..5210690
/colour="255 0 0"
/evidence=predicted
/translation="PFASIIIEHFSDDPRAAHRIEYLEDIIITLCAVLCGADNWV
EVANYGRSKAQWLKQWIALPNG-----VPSHDTFEWFARLKPQQLQOCFLNWTQAI
YQLSAGE-LIAIDGKTLRGAIAPGEQCSLIHMVSAWSHNRLVLGQRTVDEKSNEITA
IPELLKVLELEG-ALVSIDAMGCQTAIAETIIEGQG-DYVLALKGNQGDLYNDVVQLF
dhaCQTQFQGIEHDSYQTVKKGRIEHRTYWTMGQTDYLLGAE-RWAQLKSIGCVES
CRRQPGHPG---TLQRRYYLLSIESDAQR---FADAVRSHWGIENQLHWILDVGFRED
KLRACQGCSAQNLSVIRHIAANLLOQESTAKCGVKAKRLKAGWDDNYLVKILSVAAKG
"
/note="ISAs1 e-value= 1.8e-144 complete sequence hit
coverage= 100%, between model( 389 aa) positions 1; 389
length is 376aa with 16 gaps, 0 stops, absolute frame=
Plus3"
CDS
5296908..5297147
/colour="255 0 0"
/evidence=predicted
/translation="RNQQHYIRQLTAIKLLNEGHSRTQVSEQVGCSYDTLTRWMDKY

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LDGGLQGLVQPI--RHQKPSRLSPEEQQQLKEMVLTQR"
/note="IS481 e-value= 1.2e-07 fragment hit coverage=
23.36%, between model( 351 aa) positions 1; 82 length is
80aa with 2 gaps, 0 stops, absolute frame= Plus3"
CDS 5296935..5297342
/colour="255 0 0"
/evidence=predicted
/translation="RLTAIKLLNEGHSRTOVSEQVGCSYDTLTRWMDKYLDGG---LO
GLVQPIRHQKPSRLSPEEQQQLKEMVLTQRPTDYGIDRNMWTGAILAVVIEQRFEVQL
KDSRIYELLSELGLSYQRAHRDYA---NADLNAQKEWVA"
/note="IS630 e-value= 1.9e-29 fragment hit coverage=
37.50%, between model( 376 aa) positions 30; 170 length
is 136aa with 5 gaps, 0 stops, absolute frame= Plus3"
CDS 5342181..5342333
/colour="255 0 0"
/evidence=predicted
/translation="QLCLILDNNPTHKG-KMRSQLAIHLEqmgltsiQVEFLYLPSP
SPKLNLV"
/note="IS630 e-value= 4.3e-06 fragment hit coverage=
11.70%, between model( 376 aa) positions 279; 322 length
is 51aa with 1 gaps, 0 stops, absolute frame= Plus3"
CDS 5352645..5353340
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS
hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErlKEEDEYLSK
PQIAAGMIQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP
AEQAVFAEPWQSFERTFSNGTTETRYrQEIIYGqrhhQKRY"
/note="IS4 e-value= 4.7e-14 fragment hit coverage=
51.23%, between model( 486 aa) positions 1; 249 length is
232aa with 27 gaps, 0 stops, absolute frame= Plus3"
CDS 5352645..5353772
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS
hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErlKEEDEYLSK
PQIAAGMIQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP
AEQAVFAEPWQSFERTFSNGT-----TTRYR
QEIIYGQRHHQKRYWLLTDPQTLPENSTS-----YVMAA
APE----IKLDEIGDCYGFRTWIEYGLKQSKD-TLGWADFRMTHYEQIEKWWEIVMSA
FLMVSLFADVFNDS-----CPVAHQHFAQHPwWDNQNG
WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"
/note="IS4 e-value= 9.9e-07 complete sequence hit
coverage= 100%, between model( 486 aa) positions 1; 486
length is 376aa with 117 gaps, 0 stops, absolute frame=
Plus3"
CDS 5358090..5358287
/colour="255 0 0"
/evidence=predicted
/translation="ASPIELSQQOHHCLTOIVRQTTNPYRLVRRASIILSAASGESNT
QISROWQLDRNQVRYWRQRWL"
/note="IS630 e-value= 4e-07 fragment hit coverage=
17.55%, between model( 376 aa) positions 1; 66 length is
66aa with 0 gaps, 0 stops, absolute frame= Plus3"
CDS 5653053..5653250
/colour="255 0 0"
/evidence=predicted
/translation="GKHKOILLVLDGAGWHTC---KNRVVPPG--IHLKILPPYSPEL

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QPAERLWRLADEPLAN-QCFETLDDLED"  
/note="IS630 e-value= 1.4e-09 fragment hit coverage= 19.15%, between model( 376 aa) positions 275; 346 length is 66aa with 6 gaps, 0 stops, absolute frame= Plus3"  
CDS 5666475..5666576  
/colour="255 0 0"  
/evidence=predicted  
/translation="MTYRKLSHSVWECKYHVVFVPKHRKGRIYGRIRR"  
/note="IS200 e-value= 1.1e-12 fragment hit coverage= 22.08%, between model( 154 aa) positions 1; 34 length is 34aa with 0 gaps, 0 stops, absolute frame= Plus3"  
CDS 5666475..5666933  
/colour="255 0 0"  
/evidence=predicted  
/translation="MTYRKLSHSVWECKYHVVFVPKHRKGRIYGRIRRIXAIFLXAGT  
SXRECHRrrsFNARSCSX----VVEYSAEILRVQCGGLRKRKSAIYIARELGNSRNA  
-TGHKFWSRGYFVSTVG-KDEEMICXYIRpgiRSKKSKXSXNTCFGSPSPSLXGVPI  
"  
/note="IS200 e-value= 3.1e-10 complete sequence hit coverage= 100%, between model( 154 aa) positions 1; 154 length is 153aa with 7 gaps, 8 stops, absolute frame= Plus3"  
CDS 5666475..5666576  
/colour="255 0 0"  
/evidence=predicted  
/translation="MTYRKLSHSVWECKYHVVFVPKHRKGRIYGR-IRR"  
/note="IS200\_IS605 e-value= 1.5e-13 fragment hit coverage= 22.88%, between model( 153 aa) positions 1; 35 length is 34aa with 1 gaps, 0 stops, absolute frame= Plus3"  
CDS 5666475..5666906  
/colour="255 0 0"  
/evidence=predicted  
/translation="MTYRKLSHSVWECKYHVVFVPKHRKGRIYGR--IRRIXAIFLXA  
GTsxRECHRrrsFNARSCSX----VVEYSAEILRVQCGGLRKRKSAIYIARELGNSRN  
NA-TGHKFWSRGYFVSTVG-KDEEMICXYIR----PGIRSKKSKXSXNTCFGRS"  
/note="IS200\_IS605 e-value= 5.4e-10 complete sequence hit coverage= 100%, between model( 153 aa) positions 1; 153 length is 144aa with 14 gaps, 6 stops, absolute frame= Plus3"  
CDS 5666475..5666576  
/colour="255 0 0"  
/evidence=predicted  
/translation="-MTYRKLSHSVWECKYHVVFVPKHRKGRIYGRIRR"  
/note="IS605 e-value= 1.1e-11 fragment hit coverage= 23.03%, between model( 152 aa) positions 1; 35 length is 34aa with 1 gaps, 0 stops, absolute frame= Plus3"  
CDS 5666475..5666906  
/colour="255 0 0"  
/evidence=predicted  
/translation="-MTYRKLSHSVWECKYHVVFVPKHRKGRIYGRIRRIXAIFLXAG  
TSXREChrrRSFNARSCSXVVEYSAE---LRVQC-GGLRKRKSAIYIARELGNSRN-  
ATGHKFWSRGYFVSTVGKDEEMICXYIRPGIRSKK----SKSXSNXTCFGRS"  
/note="IS605 e-value= 1.7e-10 complete sequence hit coverage= 100%, between model( 152 aa) positions 1; 152 length is 144aa with 11 gaps, 7 stops, absolute frame= Plus3"  
CDS 5666769..5666846  
/colour="255 0 0"  
/evidence=predicted

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-----KQEYD-----SIKGAMWPFRKR PENLKES-EQOLLERLFA--  
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 DEMTNYFLEG-WTSGFVEGFNNRVKVLKRCYGYIDIERLFQRISLDLNGYQTFAVTX  
 TL"  
 /note="ISL3 e-value= 1e-49 fragment hit coverage= 86.03%,  
 between model( 451 aa) positions 64; 451 length is 360aa  
 with 34 gaps, 1 stops, absolute frame= Plus3"  
 CDS 5942076..5942741  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="----TGVYKQTF-KRMLHAWHTYH1SHSNAGRPPKLCRPDQLL  
 VALQYWREYRTYFHIAGDWEVSESTVCRIVHQVETALMNSGLFRLPGKKHLIQQFERP  
 DVVVMDVTETPIERPQKGQKAYYSGKRDIPSNARLLTAT--LXRLSV-----X  
 ALAQAVGMIFR-----YSRVQVSIS--IQIPRVCKIADIKGLOQPTPTAM  
 FLS-----RSHNMVNXLPCSESITVHXVRNEWALNTLIAA"  
 /note="IS5\_ISL2 e-value= 1.8e-23 complete sequence hit  
 coverage= 100%, between model( 260 aa) positions 1; 260  
 length is 222aa with 39 gaps, 4 stops, absolute frame=  
 Plus3"  
 CDS 5942136..5942447  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="SHSNAGRPPKLCRPDQLLVALQYWREYRTYFHIAGDWEVSESTV  
 CRIVHQVETALMNSGLFRLPGKKHLIQQFERPDVVMDVTETPIERPQKGQKAYYSGK  
 KR"  
 /note="IS5\_ISL2 e-value= 5e-44 fragment hit coverage= 40%,  
 between model( 260 aa) positions 26; 129 length is  
 104aa with 0 gaps, 0 stops, absolute frame= Plus3"  
 CDS 5992275..5993312  
 /colour="255 0 0"  
 /evidence=predicted  
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 -EKIEEQEQRHTRLEPLeeAQRQERLVFFFDAAHFVHRAYLGF-VWCITRI-----  
 -----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL  
 DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPYSPHLNLIERLWRFVRKE  
 CLYSKYADFPFKGAIQOCIDQCNGEHKAKLTLLSLKFQSFKK"  
 /note="IS630 e-value= 6.7e-25 complete sequence hit  
 coverage= 100%, between model( 376 aa) positions 1; 376  
 length is 346aa with 33 gaps, 0 stops, absolute frame=  
 Plus3"  
 CDS 5992275..5993312  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="PMIKIDFTAEEIQQLNYERYHHPHPRVQRRMEVLYLKSQGLSHT  
 QICOLCQISRPTLAKTLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH  
 PP-----RTSAEAQAVIEQLTGIKRSPTQIKAFLKTRIGCRYRKVGYVPGKSSL  
 -EKIEEQEQRHTRLEPLeeAQRQERLVFFFDAAHFVHRAYLGF-VWCITRI-----  
 -----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL  
 DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPYSPHLNLIERLWRFVRKE  
 CLYSKYADFPFKGAIQOCIDQCNGEHKAKLTLLSLKFQSFKK"  
 /note="IS630 e-value= 4.9e-24 complete sequence hit  
 coverage= 100%, between model( 376 aa) positions 1; 376  
 length is 346aa with 33 gaps, 0 stops, absolute frame=  
 Plus3"  
 CDS 5992335..5992493  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="HHPHPRVQRRMEVLYLKSQGLSHTQICOLCQISRPTLAKTLRQY

QQGGIEGLK"  
 /note="IS481 e-value= 3.7e-09 fragment hit coverage= 15.10%, between model( 351 aa) positions 1; 53 length is 53aa with 0 gaps, 0 stops, absolute frame= Plus3"  
 CDS 6109407..6109544  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="WQTDGWEGYARQLPDE---VVHEVSKALTQRLERTNGIVRQQTGRWHRR"  
 /note="IS1\_ORF2 e-value= 1.8e-11 fragment hit coverage= 20.68%, between model( 237 aa) positions 164; 212 length is 46aa with 3 gaps, 0 stops, absolute frame= Plus3"  
 CDS 6263616..6264854  
 /colour="255 0 0"  
 /evidence=predicted  
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 /note="ISL3 e-value= 1.8e-43 complete sequence hit coverage= 100%, between model( 451 aa) positions 1; 451 length is 413aa with 44 gaps, 1 stops, absolute frame= Plus3"  
 CDS 6263775..6264854  
 /colour="255 0 0"  
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 /note="ISL3 e-value= 1e-49 fragment hit coverage= 86.03%, between model( 451 aa) positions 64; 451 length is 360aa with 34 gaps, 1 stops, absolute frame= Plus3"  
 CDS 6300402..6300794  
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 /evidence=predicted  
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 /note="Tn3 e-value= 7.4e-17 fragment hit coverage= 12.95%, between model( 1004 aa) positions 764; 893 length is 131aa with 0 gaps, 0 stops, absolute frame= Plus3"  
 CDS 6306396..6307874  
 /colour="255 0 0"  
 /evidence=predicted  
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YRTPDYEVLTA----KVSKRSTIDVRCILYTVPSRLIGRQLELHLYHDRIVGYLERHP  
VVELPRKRVSGkGKRRDRCINYRHVGSMRLKPRAFIYCTWQSDLLPNEPEYRQIWEQL  
KAQFDLEQAAKIIVEALYIAAVQDKEQAVAVYLOQQOLQASSLTNLNRLKKQFEPQOMKO  
VPDLSIeQHS---LELYDKLLPS"  
/note="IS21\_ORF1 e-value= 1.3e-21 complete sequence hit  
coverage= 100%, between model( 525 aa) positions 1; 525  
length is 493aa with 39 gaps, 0 stops, absolute frame=  
Plus3"  
CDS 6306666..6307496  
/colour="255 0 0"  
/evidence=predicted  
/translation="QYPQLRTLQRRVRTWKALHGPS----PEVMFELRHEPGVQGF  
SDFTELKGITITIAGQPFEHLIYHYRLGYSWRYAQIIQGgESFVALIDEGLQNAFAAC  
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IESPHGHLKNRIKQAIYLGSAD----FTSVAEYQALIDAQVAKLNQQCQTK----  
-YEQEKDHLPQLPKYRTPDYEVLTA---KVSKRSTIDVRCILYTVPSRLIGRQLELH  
LYHDRIVGY----LERHPVVELPRKRVs"  
/note="IS21\_ORF1 e-value= 1e-29 fragment hit coverage= 57.90%, between model( 525 aa) positions 99; 402 length is 277aa with 28 gaps, 0 stops, absolute frame= Plus3"  
CDS complement(6395489..6394549)  
/colour="255 0 0"  
/evidence=predicted  
/translation="TKNRXPMSYQIRNWSEYNAGLKQRGSVTFWLEQS--AIVHWLET  
TPRQKRGASLTYSDTAISTFETVKC1YGLAGRQTEGFLNSLFELMGIELPVCDHSTVS  
RRKGQLSISLPVIPKQGAIHVVIDSTGVKVYG-----EGEWKTRQHGVS-K  
RRTWRKLHLSVDESTGEILTGVVTTNDVQDGEVFEDLLEGIDD-----EIEQVSAD-G  
AYDQSHCYDALMERNATAAIPPRKNA-----KIWQHGNC--NAphhpRDQ  
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LN-RMIQIAKPETVWVE"  
/note="IS5\_IS903 e-value= 1.1e-96 complete sequence hit  
coverage= 100%, between model( 347 aa) positions 1; 347  
length is 314aa with 37 gaps, 1 stops, absolute frame=  
Minus1"  
CDS complement(6395489..6394549)  
/colour="255 0 0"  
/evidence=predicted  
/translation="TKNRXPMSYQIRNWSEYNAGLKQRGSVTFWLEQS--AIVHWLET  
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RRKGQLSISLPVIPKQGAIHVVIDSTGVKVYG-----EGEWKTRQHGVS-K  
RRTWRKLHLSVDESTGEILTGVVTTNDVQDGEVFEDLLEGIDD-----EIEQVSAD-G  
AYDQSHCYDALMERNATAAIPPRKNA-----KIWQHGNC--NAphhpRDQ  
NLRAIRKQGRKRWKKQAHYHRRSLAETTMFRFKTIFGGQVRSRNFNDNQATELLLQCAA  
LN-RMIQIAKPETVWVE"  
/note="IS5\_IS903 e-value= 2.2e-96 complete sequence hit  
coverage= 100%, between model( 347 aa) positions 1; 347  
length is 314aa with 37 gaps, 1 stops, absolute frame=  
Minus1"  
CDS complement(6348974..6348694)  
/colour="255 0 0"  
/evidence=predicted  
/translation="SISFRaMQCIHC0SEN-VVKNGTKT-LKtaqvvQYFLCKDCGRR  
FN-ERSGTPMARLRpVETISMAINARTEGLGIRAGRVLGKSPTSILLWEKR"  
/note="IS1\_ORF1 e-value= 9.8e-10 fragment hit coverage= 36.82%, between model( 239 aa) positions 1; 88 length is 94aa with 3 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(6343880..6343381)  
/colour="255 0 0"  
/evidence=predicted  
/translation="QVTLIEAAVETTQQRFGWRVYVTNAPLEELSFEAVLTVRDAWI

QESGFSLKGNPLGASPLFVQRDDHAKGLMHLLSLGLRILTLIEFVVQRRLKQ-----  
 -----HKEKLFGFLFPGNPKRATTRPTTERILRAFKDISLTILGVKDeey  
 ghVSPLTLSQQRILELLGLAPDIYSS"  
 /note="IS4 e-value= 3e-08 fragment hit coverage= 37.04%,  
 between model( 486 aa) positions 307; 486 length is 167aa  
 with 19 gaps, 0 stops, absolute frame= Minus1"  
 CDS complement(6314132..6313894)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="TLAKLDHFELFILDEIGYDIKTDDETSIQSELIVHRYERRSFKI  
 TANHPFSTRXCIFC-DSSMTVAIIDRFVYHAFIIEIK"  
 /note="IS21\_ORF2 e-value= 1.3e-09 fragment hit coverage= 31.40%, between model( 258 aa) positions 157; 237 length is 80aa with 1 gaps, 1 stops, absolute frame= Minus1"  
 CDS complement(6234089..6232612)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="DSYHTRVYMNGRDLGLKQAEAAIAEISTRTGQRIEAGTHQPNR  
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 QYPQVlrltQRRVRTWKALHGPS----PEVMFELRHEPGVQGFSDFTELKGITITIA  
 GKPFEHLIYHYRLGYSGWRYAQIIQGgESFVALIDSEGLQNAFAACGGVPTQHRTDSLSA  
 AYRNMGGRS-KNLTRLYDELCDHYRLEPTRNNKG--VAHENGSIESPHGHLKNRIKO  
 AIYLRLGSAD----FTSVGGEYQALIDAQVA---KLNQOC---QAKYEQEKEHLOPLPK  
 YRTPDYEVLTA---KVSKRSTIDVRCILYTVPSRLIGRQLELHYHDRVGYLERHP  
 VVELPRKRVSGkGKRRDRCINYRHVIGSMRLKPRAFIYCTWQSDLLPNPEYRQIWEQL  
 KAQFDLEQAQKIIIVEALYIAAVQDKEQAVAVYLOQQLRSSSLTNRLLKKQFEPQOMKO  
 VPDLStEQHS---LELYDKLLPS"  
 /note="IS21\_ORF1 e-value= 3.3e-24 complete sequence hit coverage= 100%, between model( 525 aa) positions 1; 525 length is 493aa with 39 gaps, 0 stops, absolute frame= Minus1"  
 CDS complement(6233819..6232990)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="QYPQVRLTLQRRVRTWKALHGPS----PEVMFELRHEPGVQGF  
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 GGVPTQHRTDSLSAAYRNMGGRS-KNLTRLYDELCDHYRLEPTRNNKG--VAHENGS  
 IESPHGHLKNRIKOAIYLRLGSAD----FTSVGGEYQALIDAQVA---KLNQOC---QA  
 KYEQEKEHLQPLPKYRTPDYEVLTA---KVSKRSTIDVRCILYTVPSRLIGRQLELH  
 LYHDRVGY----LERHPVVELPRKRVS"  
 /note="IS21\_ORF1 e-value= 4.2e-32 fragment hit coverage= 57.90%, between model( 525 aa) positions 99; 402 length is 277aa with 28 gaps, 0 stops, absolute frame= Minus1"  
 CDS complement(6059630..6059137)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="LEKTGIESKKKTYGYR--ERD--ETQR---QAFIERLQTKHP--  
 HQIVYVDEAGIDNRADYPY-GYCPVG-----ORFYD-LKSG-KRTERVSFIA  
 ALKEGQL--FSPMTFEGSCNRLFEAWLQQSLI-SQLQLgdVIVIDNASFHGQRIEE  
 IVAEAG--CEIWYLPSPDNLNKIERWWFVLKN"  
 /note="IS630 e-value= 3e-16 fragment hit coverage= 50.80%, between model( 376 aa) positions 140; 330 length is 165aa with 28 gaps, 0 stops, absolute frame= Minus1"  
 CDS complement(6014810..6014614)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="ASPIELSQQQHHCLTQIVRQTTNPYRLVRRASIILSAASGESNT  
 QISRQWQLDRNQVRYWRQRWLD"  
 /note="IS630 e-value= 4e-07 fragment hit coverage= 17.55%, between model( 376 aa) positions 1; 66 length is

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66aa with 0 gaps, 0 stops, absolute frame= Minus1"
CDS complement(5728283..5728174)
/colour="255 0 0"
/evidence=predicted
/translation="VMKVMICPHCQSDR-LSKNGKRR-NQQCYVCKDCRKQFV"
/note="IS1_ORF1 e-value= 4.1e-06 fragment hit coverage=
16.74%, between model( 239 aa) positions 1; 40 length is
37aa with 3 gaps, 0 stops, absolute frame= Minus1"
CDS complement(5719823..5719186)
/colour="255 0 0"
/evidence=predicted
/translation="MASKTTNVkPVVVSLWKLLSKSELIHPLKAXSISYCLKRYLWQV
L-----PGS-----VMFLKAGYKSTXTVsMKQCLVLXTYHQKKGR-----
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YRQCAVaYTDFWDAYGCVFPKQ-RHQAVGKETGOTCYIERFNCTMRQRVSRLVRKTLS
FSKKLENHIGAIWMFVHHYNAS"
/note="IS1_ORF2 e-value= 4.6e-13 complete sequence hit
coverage= 100%, between model( 237 aa) positions 1; 237
length is 213aa with 27 gaps, 3 stops, absolute frame=
Minus1"
CDS complement(5719571..5719195)
/colour="255 0 0"
/evidence=predicted
/translation="DEMWSFVNDKSNKQWIWLALDVITREIVGVYVGAS---RSKQGA
RQLwNSLPGIYRQCAVAYTDFWDAYgCVFPKQRHQAVGKEtgOTCYIERFNCTMRQRV
SRLVRKTLSFSKKLENHIGAIWMF---VHHY"
/note="IS1_ORF1 e-value= 4.6e-14 fragment hit coverage=
53.97%, between model( 239 aa) positions 111; 239 length
is 126aa with 7 gaps, 0 stops, absolute frame= Minus1"
CDS complement(5719571..5719186)
/colour="255 0 0"
/evidence=predicted
/translation="DEMWSFVNDKSNKQWIWLALDVITREIVGVYVGARSQGARQLW
NSLPGIYRQCAVAYTDFWDAYGCVFPKQ-RHQAVGKETGOTCYIERFNCTMRQRVSRL
VRKTLSFSKKLENHIGAIWMFVHHYNAS"
/note="IS1_ORF2 e-value= 6.2e-32 fragment hit coverage=
54.43%, between model( 237 aa) positions 109; 237 length
is 129aa with 1 gaps, 0 stops, absolute frame= Minus1"
CDS complement(5718014..5717818)
/colour="255 0 0"
/evidence=predicted
/translation="ASPIELSQQQHCLTOIVRQTTNPYRLVRRASIILSAASGESNT
QISRQWQLDRNQVRYWRQRWLD"
/note="IS630 e-value= 4e-07 fragment hit coverage=
17.55%, between model( 376 aa) positions 1; 66 length is
66aa with 0 gaps, 0 stops, absolute frame= Minus1"
CDS complement(5509199..5509063)
/colour="255 0 0"
/evidence=predicted
/translation="WQTDGWEGYARQLPDE---VVHEVSKALTQRLERTNGIVRQQTG
RWHRR"
/note="IS1_ORF2 e-value= 1.8e-11 fragment hit coverage=
20.68%, between model( 237 aa) positions 164; 212 length
is 46aa with 3 gaps, 0 stops, absolute frame= Minus1"
CDS complement(5354885..5354170)
/colour="255 0 0"
/evidence=predicted
/translation="YLSPES-LXCRASSKVVS MXSTVGSPS-----ILARISDL
FPHCWRLGSIXINCLPYCppGRDRSDELRTLSSLTRSEISATR-----VRATGCR
CDGCDXNAHXTSPDKTKSVLF----RKKKRHTFKCQIIANRNTLEIICLNVPGPGRHD

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FQISKVSGIHIHPDTESLQDSGYQGIAAYHANSYVPLKKPQHGE LTS LQREYNRALSO  
 ERMGIEHINRSILKIFRILSERYRNRRRYALRCNLIAAIYNYEL"  
 /note="IS5\_ISL2 e-value= 8.9e-38 complete sequence hit  
 coverage= 100%, between model( 260 aa) positions 1; 260  
 length is 239aa with 23 gaps, 5 stops, absolute frame=  
 Minus1"  
 CDS complement(5354570..5354170)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="KKKRHTFKCQIIANRNTLEIICLN VGPGRRHDFQISKVSGIHIH  
 PDTESLQDSGYQGIAAYHANSYVPLKKPQHGE LTS LQREYNRALSQERM GIEHINRSIL  
 KIFRILSERYRNRRRYALRCNLIAAIYNYEL"  
 /note="IS5\_ISL2 e-value= 4.7e-61 fragment hit coverage= 51.54%, between model( 260 aa) positions 127; 260 length is 134aa with 0 gaps, 0 stops, absolute frame= Minus1"  
 CDS complement(5242232..5241538)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="FKHLHLGMIsDIKRKSLPAIARAVGLE NHQSLHHFLSESPWVAS  
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 PQIAAGMIQLQGMGFCFELVLADSLYGEAQTNFVNVL EELKLPYILA IRSN HAVWLP  
 AEQAVFAEPWQS FERTFSNGTTETTRYrQEIIYGqrhhOKRY"  
 /note="IS4 e-value= 4.7e-14 fragment hit coverage= 51.23%, between model( 486 aa) positions 1; 249 length is 232aa with 27 gaps, 0 stops, absolute frame= Minus1"  
 CDS complement(5242232..5241106)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="FKHLHLGMIsDIKRKSLPAIARAVGLE NHQSLHHFLSESPWVAS  
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 PQIAAGMIQLQGMGFCFELVLADSLYGEAQTNFVNVL EELKLPYILA IRSN HAVWLP  
 AEQAVFAEPWQS FERTFSNGT-----TETTRYR  
 QEIIYGQRHHQKRyWL LTTDPQTL PENSTS-----YVMAA  
 APE----IKLDEIGDCYGFRTWIEYGLQSKD-TLGWADFRMTHYEQIEKWWEIVMSA  
 FLMVSLFADVFNDS-----CPVAHQHFAQHPwWDNQNG  
 WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"  
 /note="IS4 e-value= 9.9e-07 complete sequence hit  
 coverage= 100%, between model( 486 aa) positions 1; 486 length is 376aa with 117 gaps, 0 stops, absolute frame= Minus1"  
 CDS complement(5175581..5174845)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="----TG VYKRTFkrMLHAWHTYHLSRSN--AGRPPKLCQCDQL  
 LVTLQYWREYRTYFHIAGDWEVSESTVC RIVHQVETALMNSGLFRLPGQKSLLQGFER  
 PDVVVMMDVTETPIERPQTRQKAYYSGKKRDIPSNARLSLTATLXrlsaltLVQVVG--  
 -----MIFRSSRVQVSISIQIPRVCKIADI KGLQ----PIMP-TAMFLSRSHNTV  
 NXLPCSESITVLXVRNEWALNTLIAAXRFSEFCRSAIAIVVVATRCGVTX"  
 /note="IS5\_ISL2 e-value= 3.2e-21 complete sequence hit  
 coverage= 100%, between model( 260 aa) positions 1; 260 length is 246aa with 22 gaps, 5 stops, absolute frame= Minus1"  
 CDS complement(5175521..5175211)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="SRSNAGRPPKLCQCDQLLVTLQYWREYRTYFHIAGDWEVSESTV  
 CRIVHQVETALMNSGLFRLPGQKSLLQGFERPDVVVMDV TETPIERPQTRQKAYYSGK  
 KR"

/note="IS5\_ISL2 e-value= 7.6e-44 fragment hit coverage= 40%, between model( 260 aa) positions 26; 129 length is 104aa with 0 gaps, 0 stops, absolute frame= Minus1" complement(5069105..5069026)  
CDS /colour="255 0 0"  
/evidence=predicted  
/translation="TFSCLNRYRRLGKDYLEYPETSEAMIY"  
/note="IS5\_IS1031 e-value= 5.8e-07 fragment hit coverage= 9.15%, between model( 295 aa) positions 246; 272 length is 27aa with 0 gaps, 0 stops, absolute frame= Minus1" complement(4933280..4932616)  
CDS /colour="255 0 0"  
/evidence=predicted  
/translation="FKYLHLGMMsDIHKSLPAIARICGLANEQGLLHFLLTESPWRPS aLEQarLNlLQLVLSGRPLTLIID-----ETEDRKKGKQTDYVQR QYLGNLGKVVDNGIVAVTAYGVVEHMTLPLMFRVYKPKsRLQSGD-----VYHSK PEIAVSMIDELLAHGQCQFDLVLADSLYGESGSTFVSHLQALQLPYVVAIRSNHGLWLP KEQRVRCCNRWRAFEHVFSFGS-----CETRYIREVI"  
/note="IS4 e-value= 4.5e-12 fragment hit coverage= 53.29%, between model( 486 aa) positions 1; 259 length is 222aa with 42 gaps, 0 stops, absolute frame= Minus1" complement(4933280..4932184)  
CDS /colour="255 0 0"  
/evidence=predicted  
/translation="FKYLHLGMMsDIHKSLPAIARICGLANEQGLLHFLLTESPWRPS aLEQarLNlLQLVLSGRPLTLIID-----ETEDRKKGKQTDYVQR QYLGNLGKVVDNGIVAVTAYGVVEHMTLPLMFRVYKPKsRLQSGD-----VYHSK PEIAVSMIDELLAHGQCQFDLVLADSLYGESGSTFVSHLQALQLPYVVAIRSNHGLWLP KEQRVRCCNRWRAFEHVFSFGS-----CETRYIREV IYGQR---LAQQfWDITDPQNLPKASTW-----YVMS EIE---GVKYHQIGNFYGLRNWVEYGLQSKN-ELGWADFRVTDYDQIERWWQVVMSA YLMVSLHSDRFEL-----PTGLSMKQQVP PVIETFSQ-----HRYWQTGKWKHLLNNLRLVIIQSLILFD"  
/note="IS4 e-value= 1.2e-06 complete sequence hit coverage= 100%, between model( 486 aa) positions 1; 486 length is 366aa with 126 gaps, 0 stops, absolute frame= Minus1" complement(4908698..4908313)  
CDS /colour="255 0 0"  
/evidence=predicted  
/translation="YADESGMDHRDEYDY-AYGPKGE-----RVYA-LKTG- RRSGRVNMIAALRAKQL--MAPFTIEGACNRTVFELwLERCLIPv1KPGQKLVI--DN ATFHKGQIQELVEKAG--CEVWYLPYSPDLNKIERSWSWIKSRIR"  
/note="IS630 e-value= 1.1e-13 fragment hit coverage= 38.83%, between model( 376 aa) positions 188; 333 length is 129aa with 20 gaps, 0 stops, absolute frame= Minus1" complement(4716020..4715806)  
CDS /colour="255 0 0"  
/evidence=predicted  
/translation="REIHEAIGVSIRTIERVRMRFVEEG---LEAAINQRsGAGRKRK IQGEQEAHLIALRCSEPPVG---HARWTLRLLAD"  
/note="IS630 e-value= 9.9e-08 fragment hit coverage= 20.74%, between model( 376 aa) positions 44; 121 length is 72aa with 7 gaps, 0 stops, absolute frame= Minus1" complement(4612568..4612411)  
CDS /colour="255 0 0"  
/evidence=predicted  
/translation="HHPHPRVQRRMEVLYLKSQGLPHAQICOLCQISRPTLAKTLRLY QQGGIEGLK"  
/note="IS481 e-value= 1.1e-08 fragment hit coverage=

15.10%, between model( 351 aa) positions 1; 53 length is  
53aa with 0 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(4319990..4319854)  
/colour="255 0 0"  
/evidence=predicted  
/translation="WQTDGWEGYARQLPDE---VVHEVSKALTQRLERTNGIVRQQTG  
RWHRR"  
/note="IS1\_ORF2 e-value= 1.8e-11 fragment hit coverage= 20.68%, between model( 237 aa) positions 164; 212 length is 46aa with 3 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(4252406..4251982)  
/colour="255 0 0"  
/evidence=predicted  
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VI--PISVILDNARYQKCQLVTDFAEIVD--IELVYLPSYSPLHNLIERLWRFVRKEC  
LYSKYYSDFHFSFKGAIQQCIDQCNTEHKAKLTSLLSLKFQSFQK"  
/note="IS630 e-value= 6.2e-18 fragment hit coverage= 38.56%, between model( 376 aa) positions 232; 376 length is 142aa with 4 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(4222007..4221850)  
/colour="255 0 0"  
/evidence=predicted  
/translation="HHPHPRVQRRMEVLYLKSQGLPHAOICOLCQISRPTLAKTLRLY  
QQGGIEGLK"  
/note="IS481 e-value= 1.1e-08 fragment hit coverage= 15.10%, between model( 351 aa) positions 1; 53 length is 53aa with 0 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(4221497..4221091)  
/colour="255 0 0"  
/evidence=predicted  
/translation="MLLVRPISTESLRLLHRIYHSSRHQVRQRAHCLILFAQGWPPY  
TLASLFSVSPKTVYNWLKA  
NNRGFAGLYNH---PGRGRKPMfNPDQQQIYEWTQASPIQLNQVLAQIEQQWSVR--  
-VSKATVKRVLKQMDMS"  
/note="IS630 e-value= 8.7e-15 fragment hit coverage= 39.63%, between model( 376 aa) positions 1; 149 length is 136aa with 13 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(4221437..4221100)  
/colour="255 0 0"  
/evidence=predicted  
/translation="SSRHQVRQRAHCLILFAQGWPPYTLASLFSVSPKTVYNWLKA  
NNRGFAGLYNH---PGRGRKPMfNPDQQQIYEWTQASPIQLNQVLAQIEQQWSVR--  
-VSKATVKRVLKQMDMS"  
/note="IS481 e-value= 3.5e-09 fragment hit coverage= 33.62%, between model( 351 aa) positions 1; 118 length is 113aa with 6 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(4218878..4218454)  
/colour="255 0 0"  
/evidence=predicted  
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VI--PISVILDNARYQKCQLVTDFAEIVD--IELVYLPSYSPLHNLIERLWRFVRKEC  
LYSKYYSDFHFSFKGAIQQCIDQCNTEHKAKLTSLLSLKFQSFQK"  
/note="IS630 e-value= 6.2e-18 fragment hit coverage= 38.56%, between model( 376 aa) positions 232; 376 length is 142aa with 4 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(4135019..4134772)  
/colour="255 0 0"  
/evidence=predicted  
/translation="MQCPLCGHPT-THXHGKTSKGSQRYRCLHCXRTFSEtfDTLYYH  
RQISPQLQTILQSHAEGSSLRGLARITGVAYNTCVSVVR"  
/note="IS1\_ORF1 e-value= 2.5e-12 fragment hit coverage=

34.31%, between model( 239 aa) positions 6; 87 length is  
 83aa with 1 gaps, 2 stops, absolute frame= Minus1"  
 CDS complement(4135019..4134334)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="----MQCPLCGHPT-THXHGKTSKGSQRYRCLHCXRTFSETfD  
 TLYYHRQISPQLQTILQSHAEGLRGLARITGVAYNTCVSVRSA--SHKAQMIHN  
 Q-----EGQAVSTDVinaDALWSFVKSKsTVNRKNXASAIAGXRX-----VLP  
 KTVAXCS--VVVLANIPTSSLKHXLRLILKAKPPVtIGKRMVETVTANYPMRXSiTxV  
 RPXRNAAXSgpmeyyGNRPGAGIDDKTNLV-KSGNRV"  
 /note="IS1\_ORF1 e-value= 1.6e-06 complete sequence hit  
 coverage= 100%, between model( 239 aa) positions 1; 239  
 length is 229aa with 25 gaps, 10 stops, absolute frame= Minus1"  
 CDS complement(4134977..4134790)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="GKTSKGSQRYRCLHCXRTFSETFdLYYHRQisPQLQTILQSH  
 AEGSSLRGLARITGVAYNT"  
 /note="IS1\_ORF2 e-value= 4.3e-06 fragment hit coverage= 24.89%, between model( 237 aa) positions 21; 79 length is 63aa with 0 gaps, 1 stops, absolute frame= Minus1"  
 CDS complement(3406541..3406153)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="FFMDESGFSLVPCIPY-GWQPIG-----TYL-EIPT  
 RSSKRLNVLGFLSRRQGL--HAYTSEQTITSEVVShCIDTFFADV--ELPTVIVVDQA  
 PIHTSQsiyEMKAEWAERG--ITLFELPSYSPHLNLIERLWQFMKYQWI"  
 /note="IS630 e-value= 6.5e-11 fragment hit coverage= 39.10%, between model( 376 aa) positions 187; 333 length is 130aa with 21 gaps, 0 stops, absolute frame= Minus1"  
 CDS complement(2707001..2705968)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="QRFIQGLSPETIHLLSRIHRHSYHHQVRQRAHCILLSFEGFNVT  
 ELMSIFAVTRKTVTWLDDWDNHC---LVGLYDQPGRGRKPKLNDVQ-KEQIRAWAKM  
 TP-----HNLNAVLAKEAWNIAVSCKTLKRILKSCSMSWRRLRRVAGQPDP  
 VEYETK-----RHOLEVLKRQEEKGELdlyLDESGFCLVPYVPY-AWQEKG-----  
 ETLGLLPSQRSSRFNVLGLMNRHNDL-TSYVFDKSITSAVVVACIDDFSRT  
 C--DQHTVVVMDQASVHKNAEIEEKIEDWKAKNVEIFWLPTYSPHLNIEIFWRFMKY  
 EWIEFAAYKCLGSLSLYIDKILKGFgKDYVIDFGXVLTKAVFISDIY"  
 /note="IS630 e-value= 1.1e-19 complete sequence hit  
 coverage= 100%, between model( 376 aa) positions 1; 376  
 length is 345aa with 36 gaps, 1 stops, absolute frame= Minus1"  
 CDS complement(2707001..2706100)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="QRFIQGLSPETIHLLSRIHRHSYHHQVRQRAHCILLSFEGFNVT  
 ELMSIFAVTRKTVTWLDDWDNHC---LVGLYDQPGRGRKPKLNDVQ-KEQIRAWAKM  
 TP-----HNLNAVLAKEAWNIAVSCKTLKRILKSCSMSWRRLRRVAGQPDP  
 VEYETK-----RHOLEVLKRQEEKGELdlyLDESGFCLVPYVPY-AWQEKG-----  
 ETLGLLPSQRSSRFNVLGLMNRHNDL-TSYVFDKSITSAVVVACIDDFSRT  
 C--DQHTVVVMDQASVHKNAEIEEKIEDWKAKNVEIFWLPTYSPHLNIEIFWRFMKY  
 EWI"  
 /note="IS630 e-value= 1.1e-24 fragment hit coverage= 88.56%, between model( 376 aa) positions 1; 333 length is 301aa with 36 gaps, 0 stops, absolute frame= Minus1"  
 CDS complement(2587106..2586868)  
 /colour="255 0 0"

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/evidence=predicted
/translation="RNQQHYIRQLTAIKLLNEGHSRTQVSEQVGCSYDTLTRWMDKY
LDGGLQGLVQPI--RHQKPSRLSPEEQQQLKEMVLTQR"
/note="IS481 e-value= 1.2e-07 fragment hit coverage=
23.36%, between model( 351 aa) positions 1; 82 length is
80aa with 2 gaps, 0 stops, absolute frame= Minus1"
complement(2587079..2586673)
/colour="255 0 0"
/evidence=predicted
/translation="RLTAIKLLNEGHSRTQVSEQVGCSYDTLTRWMDKYLDGG---LQ
GLVQPIRHQKPSRLSPEEQQQLKEMVLTQRPTDYGIDRNMWTGAILAVVIEQRFEVQL
KDSRIYELLSELGLSYQRAHRYA--NADLNAQKEWVA"
/note="IS630 e-value= 1.9e-29 fragment hit coverage=
37.50%, between model( 376 aa) positions 30; 170 length
is 136aa with 5 gaps, 0 stops, absolute frame= Minus1"
complement(2498918..2498134)
/colour="255 0 0"
/evidence=predicted
/translation="CLAAXPNTLSHFQQSMKCLYCVIM--EHNSTHCLPLMGGRHQI
KALSQSNRRLKMLIGFTRSWISPNENLHRWHQEVEXAASSKRLFEK----XVKLS
RYXsVNTQTLDRTXRAMPATAYDSDLTTLQWELLEPLIPLAAPK-GGRPRT-TDMLSVLN
AIFYLVVTGCQWRQLPHDFPCWSTVYSYFRRWRDDGTWVHINEHLRMWERVSE-----
-----DRHPSPSAACDAQSVKVGNPRCHSIGFDGgkmv
KGRKRHVLDLGLVLM-VMVMTAAN"
/note="IS5_IS427 e-value= 7.3e-07 complete sequence hit
coverage= 100%, between model( 296 aa) positions 1; 296
length is 262aa with 39 gaps, 5 stops, absolute frame=
Minus1"
complement(2498615..2497765)
/colour="255 0 0"
/evidence=predicted
/translation="TQTLDRTXRAM----PTAYDSDLTTLQWELLEPLIPLAAP-----
PGGRPRTTDMLSVLNAIFYLVVTGCQWRQLPHDFPCWSTVYSYFRRWRDDGTWVH
INEHLRMWERVSEDRHPSPSAACDAQSVKVGNPRCH-SIGFDGGKMVKGRKRHVLD
TLGLVLMVMVTAANISDQR-GAKILFWKARRQGas1SRLVRIWADAGYQGQALMKWVM
DRSQYVLEVVIKRSNDNLAGFQVVSKRWIVERTFGWLLWSRRLNKDYEVLTAEALVYV
AMIRLMVRRLAQEHXNFNSNLX"
/note="IS5_IS1031 e-value= 3.2e-108 complete sequence hit
coverage= 100%, between model( 295 aa) positions 1; 295
length is 284aa with 14 gaps, 3 stops, absolute frame=
Minus1"
complement(2498573..2497765)
/colour="255 0 0"
/evidence=predicted
/translation="YDSLTTLQWELLEPLIPLAAP-----PGGRPRTTDMLSVLNA
IFYLVVTGCQWRQLPHDFPCWSTVYSYFRRWRDDGTWVHINEHLRMWERVSEDRHPSP
SAAICDAQSVKVGNPRCH-SIGFDGGKMVKGRKRHVLDLGLVLMVMVTAANISDQR
-GAKILFWKARRQGas1SRLVRIWADAGYQGQALMKWVMDRSQYVLEVVIKRSNDNLAGF
QVVSKRWIVERTFGWLLWSRRLNKDYEVLTAEALVYVAMIRLMVRRLAQEHXNFNS
SLX"
/note="IS5_IS1031 e-value= 2.1e-110 fragment hit
coverage= 93.56%, between model( 295 aa) positions 20;
295 length is 270aa with 9 gaps, 2 stops, absolute frame=
Minus1"
complement(2498564..2498326)
/colour="255 0 0"
/evidence=predicted
/translation="DLTTLQWELLEPLIPLAAPK-GGRPRT-TDMLSVLNAIFYLVVTG
CQWRQLPHDFPCWSTVYSYFRRWRDDGTWVHINEHLRM"
/note="IS5_IS427 e-value= 3.3e-18 fragment hit coverage=

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27.70%, between model( 296 aa) positions 125; 206 length  
is 80aa with 2 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(2405255..2405098)  
/colour="255 0 0"  
/evidence=predicted  
/translation="HHPHPRVQRRMEVLYLKSQGLPHAQICOLCQISRPTLAKTLRLY  
QQGGIEGLK"  
/note="IS481 e-value= 1.1e-08 fragment hit coverage=  
15.10%, between model( 351 aa) positions 1; 53 length is  
53aa with 0 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(2383214..2382808)  
/colour="255 0 0"  
/evidence=predicted  
/translation="MLLVRPISTESLRLLHRIYHSSRHQRQRAHCLILFAOGWPPY  
TLASLFSVSPKTIVYNWLKAWNNRG---FAGLYNHPGRGRKPMFNPDQQQIYEWT-QA  
SPIQ-----LNQVLAQIEQQWSVRVSKATVKRVLQMDMSWHR"  
/note="IS630 e-value= 8.7e-15 fragment hit coverage=  
39.63%, between model( 376 aa) positions 1; 149 length is  
136aa with 13 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(2383154..2382817)  
/colour="255 0 0"  
/evidence=predicted  
/translation="SSRHQVRORAHCLILFAOGWPPYTLASLFSVSPKTIVYNWLKA  
NNRGFAGLYNH---PGRGRKPMfNPDQQQIYEWTQASPIQLNQVLAQIEQQWSVR--  
-VSKATVKRVLQMDMS"  
/note="IS481 e-value= 3.5e-09 fragment hit coverage=  
33.62%, between model( 351 aa) positions 1; 118 length is  
113aa with 6 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(2285066..2284843)  
/colour="255 0 0"  
/evidence=predicted  
/translation="SQMSTLTCPCNCRSQN-VVKNGRIHNGKQNHCKTCGRQFV--EA  
PQQKRIDSSTKGLIDKLLKEIPLAGIARVCDS"  
/note="IS1\_ORF1 e-value= 3.6e-14 fragment hit coverage=  
32.64%, between model( 239 aa) positions 1; 78 length is  
75aa with 3 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(1924193..1923499)  
/colour="255 0 0"  
/evidence=predicted  
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS  
hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR  
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErlKEEDEYLSK  
PQIAAGMIQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
AEQAVFAEPWQSFERTFSNGTTETRYrQEIIYGqrhhQKRY"  
/note="IS4 e-value= 4.7e-14 fragment hit coverage=  
51.23%, between model( 486 aa) positions 1; 249 length is  
232aa with 27 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(1924193..1923067)  
/colour="255 0 0"  
/evidence=predicted  
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS  
hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR  
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErlKEEDEYLSK  
PQIAAGMIQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
AEQAVFAEPWQSFERTFSNGT-----TETRYR  
QEIIYGQRHHQKRYWLLTDPQTL PENSTS-----YVMAA  
APE----IKLDEIGDCYGFRTWIEYGLQSKD-TLGWADFRMTHYEQIEKWWEIVMSA  
FLMVSLFADVFNDS-----CPVAHQHFAQHPwWDNQNG  
WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"  
/note="IS4 e-value= 9.9e-07 complete sequence hit

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coverage= 100%, between model( 486 aa) positions 1; 486
length is 376aa with 117 gaps, 0 stops, absolute frame=
Minus1"
complement(1895579..1895383)
/colour="255 0 0"
/evidence=predicted
/translation="ASPIELSQQQHHCLTQIVRQTTNPYRLVRRASIILSAASGESNT
QISRQWQLDRNQVRYWRQRWL"
/note="IS630 e-value= 4e-07 fragment hit coverage=
17.55%, between model( 376 aa) positions 1; 66 length is
66aa with 0 gaps, 0 stops, absolute frame= Minus1"
complement(1336244..1335394)
/colour="255 0 0"
/evidence=predicted
/translation="TQTLDRTXRAM-----PTAYDSLTAEQWELLEPLIPIAAK-----
PGGRPRTTDMRSVLNAILYLVVTCQWRQLPHDFPCWSTVSYFRRWRDDGTWVH
INEHLMQERVSEDRHPSPRAAICDAQSVKVGNPRCH-SIGFDGGKQIKGRKRHVLD
TLGLVLMVIVTAANISDQR-GAKILFWKARRQGas1SRLVRIWADAGYQGQAFMKWVM
DRFQYVLEVVIKRSVDNLAGFQVVPKRWIVERTFGWLLWSRRLNKDYELLTRTAEALAYV
AMIRLMVRRLAQEYXNFNSLX"
/note="IS5_IS1031 e-value= 3e-112 complete sequence hit
coverage= 100%, between model( 295 aa) positions 1; 295
length is 284aa with 14 gaps, 3 stops, absolute frame=
Minus1"
complement(1336202..1335394)
/colour="255 0 0"
/evidence=predicted
/translation="YDSLTAEQWELLEPLIPIAAK-----PGGRPRTTDMRSVLNA
ILYLVVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWVHINEHLMQERVSEDRHPSP
RAAICDAQSVKVGNPRCH-SIGFDGGKQIKGRKRHVLDTLGLVLMVIVTAANISDQR
-GAKILFWKARRQGas1SRLVRIWADAGYQGQAFMKWMDRFQYVLEVVIKRSVDNLAGF
QVVPKRWIVERTFGWLLWSRRLNKDYELLTRTAEALAYVAMIRLMVRRLAQEYXNFNS
SLX"
/note="IS5_IS1031 e-value= 2.4e-114 fragment hit
coverage= 93.56%, between model( 295 aa) positions 20;
295 length is 270aa with 9 gaps, 2 stops, absolute frame=
Minus1"
complement(1336193..1335955)
/colour="255 0 0"
/evidence=predicted
/translation="DLTAEQWELLEPLIPIAAKP-GGRPRT-TDMRSVLNAILYLVVTC
CQWRQLPHDFPCWSTVSYFRRWRDDGTWVHINEHLM"
/note="IS5_IS427 e-value= 1.2e-20 fragment hit coverage=
27.70%, between model( 296 aa) positions 125; 206 length
is 80aa with 2 gaps, 0 stops, absolute frame= Minus1"
complement(1225547..1225171)
/colour="255 0 0"
/evidence=predicted
/translation="EHRKSEDFALCMQYLVDGLFPQADKLHVVLNDLNTHspaalyKT
FNPDEALRILK-RIOFHYPKKGWSLNMIEFEFSALSROCLNRRIP-DIEQLRYEVTA
WEKRRNHDKATVNWLFTVDDARTKLS"
/note="IS630 e-value= 2.3e-07 fragment hit coverage=
32.45%, between model( 376 aa) positions 255; 376 length
is 126aa with 2 gaps, 0 stops, absolute frame= Minus1"
complement(1184315..1183279)
/colour="255 0 0"
/evidence=predicted
/translation="PMIKIDFTAEEIQOLNYERYHHPPHRVQRRMEVLYLKSOGLSHT
QICOLCQISRPTLAKTLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH
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-EKIEEQEQFRHTRLEPLleeAQRQERLVFFVDAAHFVHRAYLGF-VWCITRI-----
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DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPYSYSRHLNLIERLWRFVRKE
CLYSKYADFPFKGAIQQCIDQCNGEHKAKLTLLSLKFQSFKK"
/note="IS630 e-value= 3.5e-21 complete sequence hit
coverage= 100%, between model( 376 aa) positions 1; 376
length is 346aa with 33 gaps, 0 stops, absolute frame=
Minus1"
CDS complement(1184315..1183279)
/colour="255 0 0"
/evidence=predicted
/translation="PMIKIDFTAEEIQQLNYERYHHPHPRVQRRMEVLYLKSQGLSHT
QICOLCQISRPTLAKTLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH
PP-----RTSAEAQAVIEQLTGIKRSPQTQIKAFLKRGCRYRKVGYVPKGSSL
-EKIEEQEQFRHTRLEPLleeAQRQERLVFFVDAAHFVHRAYLGF-VWCITRI-----
-----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL
DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPYSYSRHLNLIERLWRFVRKE
CLYSKYADFPFKGAIQQCIDQCNGEHKAKLTLLSLKFQSFKK"
/note="IS630 e-value= 3.1e-22 complete sequence hit
coverage= 100%, between model( 376 aa) positions 1; 376
length is 346aa with 33 gaps, 0 stops, absolute frame=
Minus1"
CDS complement(1184255..1184098)
/colour="255 0 0"
/evidence=predicted
/translation="HHPHPRVQRRMEVLYLKSQGLSHTQICOLCQISRPTLA
KLRQYQQGGIEGLK"
/note="IS481 e-value= 3.7e-09 fragment hit coverage=
15.10%, between model( 351 aa) positions 1; 53 length is
53aa with 0 gaps, 0 stops, absolute frame= Minus1"
CDS complement(1119713..1118947)
/colour="255 0 0"
/evidence=predicted
/translation="--IYPSFITLGRXKNRLLDLLHnxvc
dMVLSHSNAGRPPKLCRP
DQLLVALQDWREYRTYFHIAGDWGVSESTVC
RIVQQVETaHE
LRTLP---PTRQETS
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DGCDXTDXTSpKRTKS
VLCRKKRHTLKCQIIADRNTLEIICLSFG
KGRRHDFQVFKVSGVH
IHPDTE
SLLDSGYQG-----NSYVPLKKPQQGELTS
LEREY
NHALSQERIGIEH
INRSLKMFRILSER
YCNRRRYSLRCNLIAAIYNEL"
/note="IS5_ISL2 e-value= 6.5e-76 complete sequence hit
coverage= 100%, between model( 260 aa) positions 1; 260
length is 256aa with 12 gaps, 5 stops, absolute frame=
Minus1"
CDS complement(1119629..1118947)
/colour="255 0 0"
/evidence=predicted
/translation="SHSNAGRPPKLCRP
DQLLVALQDWREYRTYFHIAGDWGVSESTV
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DGCDXTDXTSpKRTKS
VLCRKKRHTLKCQIIADRNTLEIICLSFG
KGRRHDFQVFKVSGVH
IHPDTE
SLLDSGYQG-----NSYVPLKKPQQGELTS
LEREY
NHALSQERIGIEH
INRSLKMFRILSER
YCNRRRYSLRCNLIAAIYNEL"
/note="IS5_ISL2 e-value= 1.1e-77 fragment hit coverage=
90.38%, between model( 260 aa) positions 26; 260 length
is 228aa with 10 gaps, 4 stops, absolute frame= Minus1"
CDS complement(826598..826267)
/colour="255 0 0"
/evidence=predicted
/translation="QRVKDRAAMIRLSHQGMYVEKIAALFQCNVRTVQ
TLHRWQ
QKG
---LGGLWDAPHPGAQRRWN
PED-IEYLETCLRQEERTY-----NSQQLSQKL
AKE
RN
VHLSADRIRQILKKRGXS"
/note="IS630 e-value= 8.8e-10 fragment hit coverage=

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32.45%, between model( 376 aa) positions 25; 146 length  
is 111aa with 11 gaps, 1 stops, absolute frame= Minus1"  
CDS complement(741935..741721)  
/colour="255 0 0"  
/evidence=predicted  
/translation="REIHEAIGVSIRTIERVRMRFVEEG---LEAAINQRSGAGRKRK  
IQEEQEALHLIALRCSEPPVG---HARWTLRLLAD"  
/note="IS630 e-value= 2.5e-08 fragment hit coverage= 20.74%, between model( 376 aa) positions 44; 121 length  
is 72aa with 7 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(669422..669199)  
/colour="255 0 0"  
/evidence=predicted  
/translation="SQMSTLTCPNCRSQN-VVKNGRIHNGKQNHCKTCGRQFV--EA  
PQQKRIDSSTKGLIDKLLKEPLAGIARVCDVS"  
/note="IS1\_ORF1 e-value= 3.6e-14 fragment hit coverage= 32.64%, between model( 239 aa) positions 1; 78 length  
is 75aa with 3 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(517589..517393)  
/colour="255 0 0"  
/evidence=predicted  
/translation="GKHKQILLVLGDAGWHTC---KNRVVPPG--IHLKILPPYSPEL  
OPAERLWRLADEPLAN-QCFETLDDLED"  
/note="IS630 e-value= 1.4e-09 fragment hit coverage= 19.15%, between model( 376 aa) positions 275; 346 length  
is 66aa with 6 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(481079..480364)  
/colour="255 0 0"  
/evidence=predicted  
/translation="YLSPECES-LXCRASSKVVS MXSTVGSPS-----ILARISDL  
FPHCWRLGSXLINRLPYCppGRDRSDELRTLSSLTRSEISATR-----VRATGCR  
CDGCDXNAHXTSPDKTSVLF---RKKKRHTFKYQIIANRNTLEIICLN VPGPGRHD  
FQIFKVSGIHIHPDTESLQDSGYQGIAAYHTNSYVPLKKPQHGE LTSLQREYNRALSO  
ERMGIEHINRSLKIFRILSER YRNRRRYALRCNLIAAIYNYEL"  
/note="IS5\_ISL2 e-value= 1e-38 complete sequence hit coverage= 100%, between model( 260 aa) positions 1; 260 length  
is 239aa with 23 gaps, 5 stops, absolute frame= Minus1"  
CDS complement(480764..480364)  
/colour="255 0 0"  
/evidence=predicted  
/translation="KKKRHTFKYQIIANRNTLEIICLN VPGPGRHD FQIFKVSGIHIH  
PDTESLQDSGYQGIAAYHTNSYVPLKKPQHGE LTSLQREYNRALSO ERMGIEHINRS  
KIFRILSER YRNRRRYALRCNLIAAIYNYEL"  
/note="IS5\_ISL2 e-value= 2.5e-62 fragment hit coverage= 51.54%, between model( 260 aa) positions 127; 260 length  
is 134aa with 0 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(476648..475171)  
/colour="255 0 0"  
/evidence=predicted  
/translation="DSYHTRVYMNGRDGLKQAEAAYIAEISTRTGQR IEAGTHQPNR  
-GRLQD-----QRTVPDPLADVWE---DELEPMRLRDPRLKPMTLYEYLQD-KYPG  
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GQPFEHLIYHYRLGYSGWRYAQIIQGgESFVALSEGLQNAFAACGGVPQO HRTDSL  
AYRNMGGRS-KNLTRLYDELCDHYRLEPTRNNKG--IAHENGSIESPHGH  
LKNRIKQAIYL RGSAD----FTSVAEYQALIDAQVAKLNQOCQTK-----YEQEKDHLQPLPK  
YRTPDYEVLT A---KVS KRSTIDVRCILYTVPSRLIGRQ LEHLYH  
DRIVGYLERHP  
VVELPRKRVSGkGKRRDRCINYRH VIGSMRLK PRAFIYCT QSD  
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KAQFDLEQA AKIIVEALYIAAVQDKEQAVAVYLOQQQLQASSLT  
NRLKKQFEP  
PQM KQ VPDL SIEQHS----LELYDKLLPS"

/note="IS21\_ORF1 e-value= 5e-20 complete sequence hit  
coverage= 100%, between model( 525 aa) positions 1; 525  
length is 493aa with 39 gaps, 0 stops, absolute frame=  
Minus1"  
CDS complement(476378..475549)  
/colour="255 0 0"  
/evidence=predicted  
/translation="QYPQLRTLQRRVRTWKALHGPS-----PEVMFELRHEPGVOGF  
SGFTELKGITITIAGQPFEHLIYHYRLGYSGWRYAQIIQGgESFVALIDEGLQNAFAAC  
GGVPQOHRTDSLSAAYRNMGGRS-KNLTRLYDELCDHYRLEPTRNNKG--IAHENGS  
IESPHGHLKNRIKQAIYLGSAD----FTSVAEYQALIDAQVAKLNQQCQTK----  
-YEQEKDHLQPLPKYRTPDYEVLT-----KVSKRSTIDVRCILYTVPSRLIGRQLELH  
LYHDRIVGY-----LERHPVVELPRKRVs"  
/note="IS21\_ORF1 e-value= 3.2e-28 fragment hit coverage= 57.90%, between model( 525 aa) positions 99; 402 length is 277aa with 28 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(408932..408064)  
/colour="255 0 0"  
/evidence=predicted  
/translation="EKXVKLSRYXSNTQTLDRXramptaYDSDLTTLQWELLEPLI  
PAAKPG-----GRPRTTDML-----SVLNAIFYLVVTGCQWRQ  
--LPHDFPCWSTVSYFRRWRDDGTWSQINEHLMQVRVSED---RHPSPSAACDAQ  
SVK-----VGNpRcHLIGFD-----GGKM-----VKGRKRHVLD-TL  
GLVLMVMVTAANISDQRGAK-----ILFWKAQRQGASLSRL  
VR-----IWADAGYQGQALMKWVMDRFQYVLEVIKRSDNLAGFQVVPKRWIVERTFGWL  
LWSRRLNKDYEVLTRTAEALVYVAMIRLMVRRLAQEHX"  
/note="IS5\_IS5 e-value= 1.3e-09 complete sequence hit  
coverage= 100%, between model( 422 aa) positions 1; 422  
length is 290aa with 140 gaps, 4 stops, absolute frame=  
Minus1"  
CDS complement(408893..408043)  
/colour="255 0 0"  
/evidence=predicted  
/translation="TQTLDRTXRAM-----PTAYDSDLTTLQWELLEPLI PAAK-----  
-PGGRPRTTDMLSVLNAIFYLVVTGCQWRQLPDFPCWSTVSYFRRWRDDGTWSQ  
INEHLMQVRVSED RHPSPSAACDAQSVKVNPRCH-LIGFDGGKMKVGRKRHVLD  
TLGLVLMVMVTAANISDQR-GAKILFWKAQRQGas1SRLVRIWADAGYQGQALMKWVM  
DRFQYVLEVIKRSDNLAGFQVVPKRWIVERTFGWLLWSRRLNKDYEVLTRTAEALVYV  
AMIRLMVRRLAQEHXNFSNLL"  
/note="IS5\_IS1031 e-value= 4.2e-111 complete sequence hit  
coverage= 100%, between model( 295 aa) positions 1; 295  
length is 284aa with 14 gaps, 2 stops, absolute frame=  
Minus1"  
CDS complement(408851..408043)  
/colour="255 0 0"  
/evidence=predicted  
/translation="YDSDLTTLQWELLEPLI PAAK-----PGGRPRTTDMLSVLNA  
IFYLVVTGCQWRQLPDFPCWSTVSYFRRWRDDGTWSQINEHLMQVRVSED RHPSP  
SAAICDAQSVKVNPRCH-LIGFDGGKMKVGRKRHVLD T LGLVLMVMVTAANISDQR  
-GAKILFWKAQRQGas1SRLVRIWADAGYQGQALMKWVM DRFQYVLEVIKRSDNLAGF  
QVVPKRWIVERTFGWLLWSRRLNKDYEVLTRTAEALVYVAMIRLMVRRLAQEHXNFSN  
SLL"  
/note="IS5\_IS1031 e-value= 2.8e-113 fragment hit  
coverage= 93.56%, between model( 295 aa) positions 20;  
295 length is 270aa with 9 gaps, 1 stops, absolute frame=  
Minus1"  
CDS complement(408842..408604)  
/colour="255 0 0"  
/evidence=predicted

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/note="IS605 e-value= 2.8e-08 fragment hit coverage= 15.79%, between model( 152 aa) positions 61; 84 length is 24aa with 0 gaps, 0 stops, absolute frame= Minus1"  
CDS complement(100253..99016)  
/colour="255 0 0"  
/evidence=predicted  
/translation="IRIPLNLPDI--RVLELSKTERGDWL-----IKIESTLQGTTCHQCGREITDL-HCHDQ-PFRIRHLPFEPVYLEIRPKRYRCKYCDDhpTTTOHLEWHPRSPNTKAYERWLLRILIN-STVSDVARKLGVSEDIVSGIIDRWIAAQVDWSEYADLKVMGMDEISLKRG--HR---DFVVLITIPTDgVDILAVLADRKKQQTAVANFLQSIP-IDLRQTIERVCTDMYQGFVSAVREQLPQAKIVIDRFHVTKAYRNCAKTVRKREVKRLRRRELSELS-----KQEYD-----SIKGAMWPFRKRPNLKES-EQOLLERLFA--YSPOQLQAYNLREKLTOIFEGRYTKHGAKcAIRAWCKQVLKSDIKEFDCFLTTINNWMDEMTNFLEG-WTSGFVEGFNNRVKVLKRCYGYIFDIERLFQRISLDLNGYQTFAVXTL"  
/note="ISL3 e-value= 1.8e-43 complete sequence hit coverage= 100%, between model( 451 aa) positions 1; 451 length is 413aa with 44 gaps, 1 stops, absolute frame= Minus1"  
CDS complement(100094..99016)  
/colour="255 0 0"  
/evidence=predicted  
/translation="RIRHLPFEPVYLEIRPKRYRCKYCDDhpTTTOHLEWHEPRSPNTKAYERWLLRILIN-STVSDVARKLGVSEDIVSGIIDRWIAAQVDWSEYADLKVMGMDEISLKRG--HR---DFVVLITIPTDgVDILAVLADRKKQQTAVANFLQSIP-IDLRQTIERVCTDMYQGFVSAVREQLPQAKIVIDRFHVTKAYRNCAKTVRKREVKRLRRELSELS-----KQEYD-----SIKGAMWPFRKRPNLKES-EQOLLERLFA--YSPOQLQAYNLREKLTOIFEGRYTKHGAKcAIRAWCKQVLKSDIKEFDCFLTTINNWMDEMTNFLEG-WTSGFVEGFNNRVKVLKRCYGYIFDIERLFQRISLDLNGYQTFAVXTL"  
/note="ISL3 e-value= 1e-49 fragment hit coverage= 86.03%, between model( 451 aa) positions 64; 451 length is 360aa with 34 gaps, 1 stops, absolute frame= Minus1"  
CDS complement(6333589..6332766)  
/colour="255 0 0"  
/evidence=predicted  
/translation="XRIKXKNYILINSNXKINIKLNKIRRXAF-----IGNEVPIXLKXLNYXQLDKLKXRLMQWLKKKLVKQRFKPTQLVXSIVEVVtlrtfpklsalTXRLFEKXVKLSRYXsVNTQTLDRTXRAMPTAYDSDLTTLQWELLEPLIPIAAKP-GGRPT-TDMLSVLNAIFYLVVTGCQWRQLPHDFPCWSTVYSYFRRWRDDGTWSQINEHLMQVRVSE-----DRHPSPSAAICDAQSVkvgnpRCHLIGFD-----LIGFDGGKMKVKGKRKRHVLDLGLVLVMVMVTAANIS"  
/note="IS5\_IS427 e-value= 2.1e-06 complete sequence hit coverage= 100%, between model( 296 aa) positions 1; 296 length is 275aa with 37 gaps, 14 stops, absolute frame= Minus2"  
CDS complement(6333292..6332424)  
/colour="255 0 0"  
/evidence=predicted  
/translation="EKXVKLSRYXSVNTQTLDRTXramptaYDSDLTTLQWELLEPLIPIAAKPG-----GRPRTTDML-----SVLNAIFYLVVTGCQWRQ--LPHDFPCWSTVYSYFRRWRDDGTWSQINEHLMQVRVSED---RHPSPSAAICDAQSVK-----VGNgpRchLIGFD-----GGKMLG-----VKGRKRHVLD-TLGLVLVMVMVTAANISDQRGAK-----ILFWKAQRQGASLSRLVR---IWADAGYQGQALMKWVMDRFQYVLEVVKRSNDLAGFQVIPKRWIVERTFGWLWSRRLNKDYEVLTRTAEALVYVAMIRLMVRRLAQEhx"  
/note="IS5\_IS5 e-value= 1.8e-09 complete sequence hit coverage= 100%, between model( 422 aa) positions 1; 422 length is 290aa with 140 gaps, 4 stops, absolute frame=

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        Minus2"
CDS complement(6333253..6332403)
/colour="255 0 0"
/evidence=predicted
/translation="TQTLDRXTXRAM-----PTAYDSDLTTLQWELLEPLIPIAAK-----
---PGGRPRTTDMLSVLNAIFYLVVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWSQ
INEHLMQVRVSEDRHPSPSAICDAQSVKVGNPRCH-LIGFDGGKMKVGRKRHVLVD
TLGLVLMVMVTAANISDQR-GAKILFWKAQRQGas1SRLVRIWADAGYQGOALMKWVM
DRFQYVLEVVKRSNDNLAGFQVIPKRWIVERTFGWLLWSRRLNKDYEVLTRTAEALVYV
AMIRLMVRRLAQEHXNFNSNLL"
/note="IS5_IS1031 e-value= 3.6e-111 complete sequence hit
coverage= 100%, between model( 295 aa) positions 1; 295
length is 284aa with 14 gaps, 2 stops, absolute frame=
Minus2"
CDS complement(6333211..6332403)
/colour="255 0 0"
/evidence=predicted
/translation="YDSDLTTLQWELLEPLIPIAAK-----PGGRPRTTDMLSVLNA
IFYLVVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWSQINEHLMQVRVSEDRHPSP
SAAICDAQSVKVGNPRCH-LIGFDGGKMKVGRKRHVLVDTLGLVLMVMVTAANISDQR
-GAKILFWKAQRQGas1SRLVRIWADAGYQGQALMKWVMDRFQYVLEVVKRSNDNLAGF
QVIPKRWIVERTFGWLLWSRRLNKDYEVLTRTAEALVYVAMIRLMVRRLAQEHXNFNSN
SLL"
/note="IS5_IS1031 e-value= 2.4e-113 fragment hit
coverage= 93.56%, between model( 295 aa) positions 20;
295 length is 270aa with 9 gaps, 1 stops, absolute frame=
Minus2"
CDS complement(6333202..6332964)
/colour="255 0 0"
/evidence=predicted
/translation="DLTTLQWELLEPLIPIAAK-PGGRPRT-TDMLSVLNAIFYLVVTG
CQWRQLPHDFPCWSTVSYFRRWRDDGTWSQINEHLM"
/note="IS5_IS427 e-value= 2e-19 fragment hit coverage=
27.70%, between model( 296 aa) positions 125; 206 length
is 80aa with 2 gaps, 0 stops, absolute frame= Minus2"
CDS complement(6280795..6279558)
/colour="255 0 0"
/evidence=predicted
/translation="IRIPLNLPDI--RVLELSKTERGDWL-----IKIESTLQGTTTC
HQCGREITDL-HCHDQ-PFRIRHLPLFEVPVYLEIRPKRYRCKYCDDhpTTTQHLEWH
EPRSPNTKAYERWLLRILIN-STVSDVARKLGVSEDIVSGIIDRWIAAQVDWSEYADL
KVMGMDEISLKRG--HR---DFVVLITIPTTdgVDILAVLADRQKQTVANFLQSIPI
DLRQTIERVCTDMYQGFVSAVREQLPQAKIVIDRFHVTKAYRNCA DTVRKREVKRLRR
ELS-----KQEYD-----SIKGAMWPFRKR PENLKES-EQOLLER
LFA--YSPQLKQAYNLREKLTOIFEGRYTKHGAKcAIRAWCKQVLKSDIKEFDCFLTT
INNWMDEMTNYFLEG-WTSGFVEGFNNRVKVLKRCYGYIDIERLFQRISLDLNGYQT
FAVTXTL"
/note="ISL3 e-value= 1.8e-43 complete sequence hit
coverage= 100%, between model( 451 aa) positions 1; 451
length is 413aa with 44 gaps, 1 stops, absolute frame=
Minus2"
CDS complement(6280636..6279558)
/colour="255 0 0"
/evidence=predicted
/translation="RIRHLPLFEVPVYLEIRPKRYRCKYCDDhpTTTQHLEWEPRSP
NTKAYERWLLRILIN-STVSDVARKLGVSEDIVSGIIDRWIAAQVDWSEYADLKVMGM
DEISLKRG--HR---DFVVLITIPTTdgVDILAVLADRQKQTVANFLQSIPI-IDLRQ
TIERVCTDMYQGFVSAVREQLPQAKIVIDRFHVTKAYRNCA DTVRKREVKRLRRELS-
-----KQEYD-----SIKGAMWPFRKR PENLKES-EQOLLERLFA--
YSPQLKQAYNLREKLTOIFEGRYTKHGAKcAIRAWCKQVLKSDIKEFDCFLTTINNW

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DEMTNYFLEG-WTSGFVEGFNNRVKVLKRRCYGIFDIERLFQRISLDLNGYQTFAVTX
TL"
/note="ISL3 e-value= 1e-49 fragment hit coverage= 86.03%,
between model( 451 aa) positions 64; 451 length is 360aa
with 34 gaps, 1 stops, absolute frame= Minus2"
CDS complement(6250273..6249804)
/colour="255 0 0"
/evidence=predicted
/translation="EAVYILDGLLKN--TSEIQPDTIHGDTQSOSCTVFALAFLLGIT
LMPRIRGWQNLAFYRPSRGTRYK--HLDLSLFTEVTDWDLIETHLPDMLRVALSIKDGF
VQASTLLRKLGTSRKNKLFQAFHELGGVLRTIFLLQYINDPQMGTIHAETNKCEAF
N"
/note="Tn3 e-value= 2.6e-14 fragment hit coverage=
15.94%, between model( 1004 aa) positions 740; 899 length
is 157aa with 4 gaps, 0 stops, absolute frame= Minus2"
CDS complement(6238489..6238101)
/colour="255 0 0"
/evidence=predicted
/translation="FFMDESGFSLVPCIPY-GWQPIG-----TYL-EIPT
RSSKRLNVLGFLSRRQGL--HAYTSEQTITSEVVShCIDTFFADV--ELPTVIVVDQA
PIHTSQsiyEMKAWEARG--ITLFELPSYSPHLNLIERLWQFMKYQWI"
/note="IS630 e-value= 6.5e-11 fragment hit coverage=
39.10%, between model( 376 aa) positions 187; 333 length
is 130aa with 21 gaps, 0 stops, absolute frame= Minus2"
CDS complement(6232594..6231831)
/colour="255 0 0"
/evidence=predicted
/translation="SPYQHLSLYLKLRLSHMLTHWESIESQA-MQENWSYAEFLLAL
CETEAQRREQARLKRALTEARLPNA-KSFTNFDFSHCPQLNPAPLMQLAAdPGWLERA
ENCLILGPSVGKTHLATGVSKKMLEFGKRVKFFAANALVQHLOQAKLQLQLH-PMLK
KLDRYDLLVLDLGYCKKSEAETSVLFELIAHRYERKSLLITANQPFSQWDDIFT-DS
MMAVAIIDRLIIHHGLIIKIQADSYRRKSATQRTAQTSPPQ"
/note="IS21_ORF2 e-value= 1.3e-82 complete sequence hit
coverage= 100%, between model( 258 aa) positions 1; 258
length is 255aa with 4 gaps, 0 stops, absolute frame=
Minus2"
CDS complement(6232594..6231831)
/colour="255 0 0"
/evidence=predicted
/translation="SPYQHLSLYLKLRLSHMLTHWESIESQA-MQENWSYAEFLLAL
CETEAQRREQARLKRALTEARLPNA-KSFTNFDFSHCPQLNPAPLMQLAAdPGWLERA
ENCLILGPSVGKTHLATGVSKKMLEFGKRVKFFAANALVQHLOQAKLQLQLH-PMLK
KLDRYDLLVLDLGYCKKSEAETSVLFELIAHRYERKSLLITANQPFSQWDDIFT-DS
MMAVAIIDRLIIHHGLIIKIQADSYRRKSATQRTAQTSPPQ"
/note="IS21_ORF2 e-value= 3.4e-83 complete sequence hit
coverage= 100%, between model( 258 aa) positions 1; 258
length is 255aa with 4 gaps, 0 stops, absolute frame=
Minus2"
CDS complement(6209392..6208452)
/colour="255 0 0"
/evidence=predicted
/translation="TKNRXPMSYQIRNWSEYNAGLKQRGSVTFWLEQS--AIVHWLET
TPRQKRGASLTYSDTAISTFETVKC1YGLAGRQTEGFLNSLFELMGIELPVCVDHSTVS
RRKGQLSISLPVIPKQGAHVVIDSTGVKVYG-----EGEWKTRQHGVS-K
RRTWRKLHLSVDESTGEILTGVVTTNDVQDGEVFEDLLEGIDD----EIEQVSAD-G
AYDQSHCYDALMERNATAIIPPRKNA-----KIWQHGNC--NApphpRDQ
NLRAIRKQGRKRWKQAHYHRRSLAETTMFRFKTIFGGQVRSRNFDNQATELLLQCAA
LN-RMIQIAKPETVWVE"
/note="IS5_IS903 e-value= 1.1e-96 complete sequence hit
coverage= 100%, between model( 347 aa) positions 1; 347

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length is 314aa with 37 gaps, 1 stops, absolute frame= Minus2"  
CDS complement(6209392..6208452)  
/colour="255 0 0"  
/evidence=predicted  
/translation="TKNRXPMSYQIRNWSEYNAGLKQRGSVTFWLEQS--AIVHWLET  
TPRQKRGASLTYSDTAISTFETVKCIYGLAGRQTEGFLNSLFELMGIELPVCVDHSTVS  
RRKGQLSISLPPVIPKQGAIHVVIDSTGVKVYG-----EGEWKTRQHGVS-K  
RRTWRKLHLSVDESTGEILTGVVTTNDVQDGEVFEDLLEGIDD-----EIEQVSAD-G  
AYDQSHCYDALMERNATAAIPPRKNA-----KIWQHGNC--NApphpRDQ  
NLRAIRKQGRKRWKQAHYHRRSLAETTMFRFKTIFGGQVRSRNFDNQATELLLQCAA  
LN-RM1QIAKPETVWVE"  
/note="IS5\_IS903 e-value= 2.2e-96 complete sequence hit  
coverage= 100%, between model( 347 aa) positions 1; 347  
length is 314aa with 37 gaps, 1 stops, absolute frame= Minus2"  
CDS complement(6167842..6167601)  
/colour="255 0 0"  
/evidence=predicted  
/translation="VKLAEELIPWESFESEYADQFSQ---TMGAPAKPFRVALGTLI  
EKLGISDAETVEQIRENPYLQYFLGFSEYRESAPFDASML"  
/note="IS5\_IS5 e-value= 2.6e-06 fragment hit coverage= 19.91%, between model( 422 aa) positions 23; 106 length is 81aa with 3 gaps, 0 stops, absolute frame= Minus2"  
CDS complement(6120718..6119784)  
/colour="255 0 0"  
/evidence=predicted  
/translation="CWVGIDVSKQNLDIHIRPSGH----IFQHPNDKDGISALVASL  
ESVS----IERIVLEATGGMELPAAVALSQA---GMAVAVVNPRQARDFA-KATGQI  
AKTDTIDAAILAHFA--EAIRPETRPLASEESQLLGELVTRRHQIVDMITAENRLAA  
MHGPM--KEHIEQHIE-----  
-----WLKTQLNELDEQLQRTIROTQTPVWCEQAKLL  
KS-----VPGVGDVLSSVLLVDLP-ELGKLDsr-KIACLVGLAPLNRSQG-KFR  
-GKRMWIWGGRGRVRTALYMPYLVAVRNPVLFKAFYERLVGQGK--PKKVALTACMRK  
LIIILNAMVKNNQWNPEMARGAX"  
/note="IS110 e-value= 6.8e-68 complete sequence hit  
coverage= 100%, between model( 416 aa) positions 1; 416  
length is 312aa with 104 gaps, 1 stops, absolute frame= Minus2"  
CDS complement(6120718..6119784)  
/colour="255 0 0"  
/evidence=predicted  
/translation="CWVGIDVSKQNLDIHIRPSGH----IFQHPNDKDGISALVASL  
ESVS----IERIVLEATGGMELPAAVALSQA---GMAVAVVNPRQARDFA-KATGQI  
AKTDTIDAAILAHFA--EAIRPETRPLASEESQLLGELVTRRHQIVDMITAENRLAA  
MHGPM--KEHIEQHIE-----  
-----WLKTQLNELDEQLQRTIROTQTPVWCEQAKLL  
KS-----VPGVGDVLSSVLLVDLP-ELGKLDsr-KIACLVGLAPLNRSQG-KFR  
-GKRMWIWGGRGRVRTALYMPYLVAVRNPVLFKAFYERLVGQGK--PKKVALTACMRK  
LIIILNAMVKNNQWNPEMARGAX"  
/note="IS110 e-value= 2.2e-68 complete sequence hit  
coverage= 100%, between model( 416 aa) positions 1; 416  
length is 312aa with 104 gaps, 1 stops, absolute frame= Minus2"  
CDS complement(6013789..6013572)  
/colour="255 0 0"  
/evidence=predicted  
/translation="RIRFVYIPKHTSWLNQIECWFSILVRRLIRRGNFTSKDDLQQR  
LEFIEYFNhtMAKPFQWQFKGFQPRLXLM"  
/note="IS630 e-value= 4e-10 fragment hit coverage=

19.15%, between model( 376 aa) positions 305; 376 length  
 is 73aa with 0 gaps, 1 stops, absolute frame= Minus2"  
 CDS complement(6013741..6013632)  
   /colour="255 0 0"  
   /evidence=predicted  
   /translation="IECWFSILVRLIR--RGNFTSKDDLQQRILEFIEYFNH"  
   /note="IS3\_IS150\_ORF2 e-value= 2e-08 fragment hit  
   coverage= 10.03%, between model( 389 aa) positions 329;  
   367 length is 37aa with 2 gaps, 0 stops, absolute frame= Minus2"  
 CDS complement(5927854..5927166)  
   /colour="255 0 0"  
   /evidence=predicted  
   /translation="TDLFKWRHYQFEIILLNVRWYCRYTLSYRNLEEMMG-RGFKVDH  
   ITIHRWVFKYSELDRK-CRHLKP-THASSRVDETYVKIHXQWRYLYRAVDSE-SYTL  
   DFLLTAKRDTKAAKRFLTKALNTXDSWVXISSIQCGRHPAYPPAVEQLQADERIPEKE  
   KVRQVKYLNNRVEQDRIGIKKLVNPNGFGSCNSARRTLKGFESMNICKVQIKNVGK  
   DDVIG-QIYFINQIFGL"  
   /note="IS6 e-value= 1.5e-77 complete sequence hit  
   coverage= 100%, between model( 235 aa) positions 1; 235 length is 230aa with 5 gaps, 3 stops, absolute frame= Minus2"  
 CDS complement(5927854..5927166)  
   /colour="255 0 0"  
   /evidence=predicted  
   /translation="TDLFKWRHYQFEIILLNVRWYCRYTLSYRNLEEMMG-RGFKVDH  
   ITIHRWVFKYSELDRK-CRHLKP-THASSRVDETYVKIHXQWRYLYRAVDSE-SYTL  
   DFLLTAKRDTKAAKRFLTKALNTXDSWVXISSIQCGRHPAYPPAVEQLQADERIPEKE  
   KVRQVKYLNNRVEQDRIGIKKLVNPNGFGSCNSARRTLKGFESMNICKVQIKNVGK  
   DDVIG-QIYFINQIFGL"  
   /note="IS6 e-value= 6.2e-80 complete sequence hit  
   coverage= 100%, between model( 235 aa) positions 1; 235 length is 230aa with 5 gaps, 3 stops, absolute frame= Minus2"  
 CDS complement(5746405..5745369)  
   /colour="255 0 0"  
   /evidence=predicted  
   /translation="CMIKIDFTAEEIQHLNYERYHHPHPRVQRRMEVLYLKSQGLPHA  
   QICQLCQISRPTLAKTLRLYQQGG---IEGLKTLEYKGQSSSLNAHS-DSVRAYFEQH  
   PP-----RTSAEAQAVIEQLTGIKRSPQTQIKAFLKRGCRSRKVGVYVPKGSSL  
   -EKIEEQEQRQTRLEPLeAQRQERLVFFVDAAHFVHRAYLGF-LWCLRI-----  
   -----FIPSPS-GRQRFNVLGALNAVTKEvTSITNHTYINSHSMCLLLAKLALL  
   DPVI--PISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPSYPHLNLIERLWRFVRK  
   ECLYSKYYSDHSFKGAIQQCIDQCNTEHKAKLTSLLSLKFQSFK"  
   /note="IS630 e-value= 4e-22 complete sequence hit  
   coverage= 100%, between model( 376 aa) positions 1; 376 length is 346aa with 34 gaps, 0 stops, absolute frame= Minus2"  
 CDS complement(5746345..5746188)  
   /colour="255 0 0"  
   /evidence=predicted  
   /translation="HHPHPRVQRRMEVLYLKSQGLPHAOICOLCQISRPTLAKTLRLY  
   QQGGIEGLK"  
   /note="IS481 e-value= 1.1e-08 fragment hit coverage= 15.10%, between model( 351 aa) positions 1; 53 length is 53aa with 0 gaps, 0 stops, absolute frame= Minus2"  
 CDS complement(5746339..5745369)  
   /colour="255 0 0"  
   /evidence=predicted  
   /translation="PHPRVQRRMEVLYLKSQGLPHAQICOLCQISRPTLAKTLRLYQQ"

GG---IEGLKTLEYKGQSSSLNAHS-DSVRAYFEQHPP-----RTSAEAQAVIE  
 QLTGIKRSPTQIKAFLKRIGCRSRKVGVPGKSSL-P-EKIEEQEQRQTRLEPLleeA  
 QRQERLVFFVDAAHFVHRAYLGF-LWCLRRI-----FIPSPS-GRQRFN  
 VLGALNAVTKEvTSITNHTYINSHSMCLLLAKLALLDPVI--PISVILDNARYQKCQL  
 VTDFAEIVD--IELVYLPSYSPHLNLIERLWRFVRKECLYSKYYSDFHSGFKGAIQQCI  
 DQCNTEHKAKLTSLLSLKFQSFQK"  
 /note="IS630 e-value= 9.5e-24 fragment hit coverage= 94.15%, between model( 376 aa) positions 23; 376 length is 324aa with 34 gaps, 0 stops, absolute frame= Minus2"  
 CDS complement(5716993..5716776)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="RIRFYVYIPKHTSWLNQIECWFSILVRRRLIRRGNFTSKDDLQORI  
 LEFIEYFNhtMAKPFQWFKGFQPRXLXLM"  
 /note="IS630 e-value= 4e-10 fragment hit coverage= 19.15%, between model( 376 aa) positions 305; 376 length is 73aa with 0 gaps, 1 stops, absolute frame= Minus2"  
 CDS complement(5716945..5716836)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="IECWFSILVRRRLIR--RGNFTSKDDLQQRILEFIEYFNH"  
 /note="IS3\_IS150\_ORF2 e-value= 2e-08 fragment hit coverage= 10.03%, between model( 389 aa) positions 329; 367 length is 37aa with 2 gaps, 0 stops, absolute frame= Minus2"  
 CDS complement(5652220..5652039)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="AVAESFFGTLKTELiySTTFANRA--MAKTAIAEWIEVFYNRQR  
 LHSTIGHCAPVQFEENYWR"  
 /note="IS3\_IS150\_ORF1 e-value= 1.1e-07 fragment hit coverage= 20.59%, between model( 306 aa) positions 244; 306 length is 61aa with 2 gaps, 0 stops, absolute frame= Minus2"  
 CDS complement(5652220..5652060)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="AVAESFFGTLKTELiy--STTFANRAMAKTAIAEWIEVFYNRQR  
 LHSTIGHCAPVQ"  
 /note="IS3\_IS150\_ORF2 e-value= 3.7e-12 fragment hit coverage= 14.14%, between model( 389 aa) positions 327; 381 length is 54aa with 2 gaps, 0 stops, absolute frame= Minus2"  
 CDS complement(5652220..5652042)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="AVAESFFGTLK--TELIySTTFANRAMAKTAIAEWIEVFYNRQR  
 LHSTIGHCAPVQFEENYWR"  
 /note="IS3\_IS3\_ORF1 e-value= 3.3e-23 fragment hit coverage= 21.68%, between model( 286 aa) positions 225; 286 length is 60aa with 2 gaps, 0 stops, absolute frame= Minus2"  
 CDS complement(5652220..5652030)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="AVAESFFGTLKTELiySTTFANRAMAKTAIAEWIEVFYNRQLH  
 STIGHCAPVQFEENYWRTH"  
 /note="IS3\_IS3\_ORF2 e-value= 1.9e-21 fragment hit coverage= 22.22%, between model( 288 aa) positions 225; 288 length is 64aa with 0 gaps, 0 stops, absolute frame=

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Minus2"
CDS complement(5652220..5652012)
/colour="255 0 0"
/evidence=predicted
/translation="AVAESFFGTLKTELIYS----TTFANRAMAKTAIAEWFYNR
QRLHSTIGHCAPVQEENYWRTRHQTLVAX"
/note="IS3_IS51_ORF1      e-value= 1.5e-22 fragment hit
coverage= 24.10%, between model( 307 aa) positions 234;
307 length is 70aa with 4 gaps, 1 stops, absolute frame=
Minus2"
CDS complement(5652220..5652030)
/colour="255 0 0"
/evidence=predicted
/translation="AVAESFFGTLKTELIYSTTFANRAMAKTAIAEWFYNRQRLH
STIGHCAPVQEENYWRTRH"
/note="IS3_IS51_ORF2      e-value= 2.3e-14 fragment hit
coverage= 20.50%, between model( 317 aa) positions 245;
309 length is 64aa with 1 gaps, 0 stops, absolute frame=
Minus2"
CDS complement(5522092..5521956)
/colour="255 0 0"
/evidence=predicted
/translation="WQTDGWEGYSRQLADE---VIHHVSKALTORLERTNGILROOTG
RWHRR"
/note="IS1_ORF2      e-value= 1.6e-12 fragment hit coverage=
20.68%, between model( 237 aa) positions 164; 212 length
is 46aa with 3 gaps, 0 stops, absolute frame= Minus2"
CDS complement(5510998..5509761)
/colour="255 0 0"
/evidence=predicted
/translation="IRIPLNLPDI--RVLELSKTERGDWL-----IKIESTLQGTTC
HQCGREITDL-HCHDQ-PFRIRHLPLFEVPVYLEIRPKRYRCKYCDDhpTTTQHLEWH
EPRSPNTKAYERWLLRILIN-STVSDVARKLGVSEDIVSGIIDRWIAAQVDWSEYADL
KVMGMDEISLKRG--HR---DFVVLITIPTTdgVDILAVLADRQQTANFLQSIP-I
DLRQTIERVCTDMYQGFVSAVREQLPQAKIVIDRFHVTKAYRNCADTVRKREVKRLRR
ELS-----KQEYD-----SIKGAMWPFRKRPNLKES-EQOLLERLFA--
LFA--YSPQLKQAYNLREKLTQIFEGRYTKHGAKcAIRAWCKQVLKSDiKEFDCFLTT
INNWMDEMTNYFLEG-WTSGFVEGFNNRVKVLKRCYGYGIFDIERLFQRISLDLNGYQT
LVVHQRS"
/note="ISL3      e-value= 4.5e-44 complete sequence hit
coverage= 100%, between model( 451 aa) positions 1; 451
length is 413aa with 44 gaps, 0 stops, absolute frame=
Minus2"
CDS complement(5510839..5509761)
/colour="255 0 0"
/evidence=predicted
/translation="RIRHLPLFEVPVYLEIRPKRYRCKYCDDhpTTTQHLEWHEPRSP
NTKAYERWLLRILIN-STVSDVARKLGVSEDIVSGIIDRWIAAQVDWSEYADLKVGMG
DEISLKRG--HR---DFVVLITIPTTdgVDILAVLADRQQTANFLQSIP-IDLRQT
IERVCTDMYQGFVSAVREQLPQAKIVIDRFHVTKAYRNCADTVRKREVKRLRRELSS-
-----KQEYD-----SIKGAMWPFRKRPNLKES-EQOLLERLFA--
YSPQLKQAYNLREKLTQIFEGRYTKHGAKcAIRAWCKQVLKSDiKEFDCFLTTINNW
DEMTNYFLEG-WTSGFVEGFNNRVKVLKRCYGYGIFDIERLFQRISLDLNGYQTLVVHQ
RS"
/note="ISL3      e-value= 2.6e-50 fragment hit coverage=
86.03%, between model( 451 aa) positions 64; 451 length
is 360aa with 34 gaps, 0 stops, absolute frame= Minus2"
CDS complement(5509729..5509467)
/colour="255 0 0"
/evidence=predicted

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/translation="LFYFLMQCPLCGHPK-THKGKTSKGSQRYRCPHCQQTFS-Etf
DTLCYRRQiSPETIQTILQAHVEGSSLRGLSRITGVAYNTCVSVVR"
/note="IS1_ORF1 e-value= 1.7e-15 fragment hit coverage=
36.40%, between model( 239 aa) positions 1; 87 length is
88aa with 2 gaps, 0 stops, absolute frame= Minus2"
CDS complement(5475031..5474574)
/colour="255 0 0"
/evidence=predicted
/translation="MTYRKLSHSVWECKYHVVFPKYRKRIYGRIRQNLGDIFH-EL
ARHKESAIEEGHMLDHVHMLLSIPPKYSVSNVGYVKGKSAIYIARELGNNSRNA-TG
HKFWSRGYFVSTVG-RDEEVIRRIRHQEQEEQKLEQLNLFrAXPKSPLRGNS"
/note="IS200 e-value= 9.6e-56 complete sequence hit
coverage= 100%, between model( 154 aa) positions 1; 154
length is 153aa with 3 gaps, 1 stops, absolute frame=
Minus2"
CDS complement(5475031..5474574)
/colour="255 0 0"
/evidence=predicted
/translation="MTYRKLSHSVWECKYHVVFPKYRKRIYGRIRQNLGDIFH-EL
ARHKESAIEEGHMLDHVHMLLSIPPKYSVSNVGYVKGKSAIYIARELGNNSRNA-TG
HKFWSRGYFVSTVG-RDEEVIRRIRHQEQEEQKLEQLNLFrAXPKSPLRGNS"
/note="IS200 e-value= 5.7e-55 complete sequence hit
coverage= 100%, between model( 154 aa) positions 1; 154
length is 153aa with 3 gaps, 1 stops, absolute frame=
Minus2"
CDS complement(5475031..5474577)
/colour="255 0 0"
/evidence=predicted
/translation="MTYRKLSHSVWECKYHVVFPKYRKRIYGR-IRQNLGDIFHEL
ARHKESAIEEGHMLDHVHMLLSIPPKYSVSNVGYVKGKSAIYIARELGNNSRNA-TG
HKFWSRGYFVSTVG-RDEEVIRRIRHQEQEEQKLEQLNLFrAXPKSPLRGNS"
/note="IS200_IS605 e-value= 8.6e-58 complete sequence hit
coverage= 100%, between model( 153 aa) positions 1; 153
length is 152aa with 3 gaps, 1 stops, absolute frame=
Minus2"
CDS complement(5475031..5474577)
/colour="255 0 0"
/evidence=predicted
/translation="MTYRKLSHSVWECKYHVVFPKYRKRIYGR-IRQNLGDIFHEL
ARHKESAIEEGHMLDHVHMLLSIPPKYSVSNVGYVKGKSAIYIARELGNNSRNA-TG
HKFWSRGYFVSTVG-RDEEVIRRIRHQEQEEQKLEQLNLFrAXPKSPLRGNS"
/note="IS200_IS605 e-value= 2.2e-58 complete sequence hit
coverage= 100%, between model( 153 aa) positions 1; 153
length is 152aa with 3 gaps, 1 stops, absolute frame=
Minus2"
CDS complement(5475031..5474577)
/colour="255 0 0"
/evidence=predicted
/translation="-MTYRKLSHSVWECKYHVVFPKYRKRIYGRIRQNLGDIFHEL
ARHKESAIEEGHMLDHVHMLLSIPPKYSVSNVGYVKGKSAIYIARELGNNSRN-ATG
HKFWSRGYFVSTVGRDEEVIRRIRHQEQEEQKLEQLNLfrAXPKSPLRGSN"
/note="IS605 e-value= 1e-51 complete sequence hit
coverage= 100%, between model( 152 aa) positions 1; 152
length is 152aa with 2 gaps, 1 stops, absolute frame=
Minus2"
CDS complement(5475031..5474577)
/colour="255 0 0"
/evidence=predicted
/translation="-MTYRKLSHSVWECKYHVVFPKYRKRIYGRIRQNLGDIFHEL
ARHKESAIEEGHMLDHVHMLLSIPPKYSVSNVGYVKGKSAIYIARELGNNSRN-ATG

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HKFWSRGYFVSTVGRDEEVIRRYIRHQEQQEQQKLEQLNLfrAXPKSPLRGSN"
/note="IS605 e-value= 5.5e-52 complete sequence hit
coverage= 100%, between model( 152 aa) positions 1; 152
length is 152aa with 2 gaps, 1 stops, absolute frame=
Minus2"
CDS
complement(5354932..5354196)
/colour="255 0 0"
/evidence=predicted
/translation="----TGVYKRTFkpMLHAWHTYHLSRSN--AGRPPKLCRCRDQ
LVALQYWREYRTYFHIAGDWEVSESTVCRIHVQVETALMNSGLFRLPGQKSLLQGFER
PDVVVMDVTETPIERPQTRQKAYYSGKKRDIPSNARSLTATLXRLSALT-----
--LVQVVGMIFrspfqvsISIQIPRVCKIADIKGLQ----PIMP-TAMFLSRSHNT
VNXLPCSESITVLXVRNEWALNTLIAAXRFSEFCRSAIAIVVVATRCGVTX"
/note="IS5_ISL2 e-value= 9.6e-21 complete sequence hit
coverage= 100%, between model( 260 aa) positions 1; 260
length is 246aa with 23 gaps, 5 stops, absolute frame=
Minus2"
CDS
complement(5354872..5354562)
/colour="255 0 0"
/evidence=predicted
/translation="SRSNAGRPPKLCRCRDQLLVALQYWREYRTYFHIAGDWEVSESTV
CRIVHQVETALMNSGLFRLPGQKSLLQGFERPDVVVMDVTETPIERPQTRQKAYYSGK
KR"
/note="IS5_ISL2 e-value= 9.3e-44 fragment hit coverage=
40%, between model( 260 aa) positions 26; 129 length is
104aa with 0 gaps, 0 stops, absolute frame= Minus2"
CDS
complement(5338738..5338023)
/colour="255 0 0"
/evidence=predicted
/translation="YLSPES-LQCRASSKVVS MXSTVGSPS-----ILARISDL
FPHCWRLGSLXINCLPYCppGRDRSDELRTLSSLTRSEISATR-----VRATGCR
CDGCDXNAHXTSPDKTSVLF---RKKKRHTFKCQIIANRNTLEIICLN VGPGRHD
FQIFKGSGIHIHPDTESLQDSGYQGIAAYHANSYVPLKKPQHGE LTSLQREYNRALSO
ERMGIEHINRSLKIFRILSER YRNRRR RYALRCNLIAAIYNYEL"
/note="IS5_ISL2 e-value= 6.9e-39 complete sequence hit
coverage= 100%, between model( 260 aa) positions 1; 260
length is 239aa with 23 gaps, 4 stops, absolute frame=
Minus2"
CDS
complement(5338423..5338023)
/colour="255 0 0"
/evidence=predicted
/translation="KKKRHTFKCQIIANRNTLEIICLN VGPGRHD FQIFKGSGIHIH
PDTESLQDSGYQGIAAYHANSYVPLKKPQHGE LTSLQREYNRALSQERMGIEHINRSL
KIFRILSER YRNRRR RYALRCNLIAAIYNYEL"
/note="IS5_ISL2 e-value= 6.5e-62 fragment hit coverage=
51.54%, between model( 260 aa) positions 127; 260 length
is 134aa with 0 gaps, 0 stops, absolute frame= Minus2"
CDS
complement(4930255..4929975)
/colour="255 0 0"
/evidence=predicted
/translation="SMECPYCQSEK-ILKRGFD S1qdgTLVQRYQCKDCNRRFN-ERT
GTPMARL RtasSVVSYAIKARTEGMGVRSAGRTFGKSHTTIMRWEKRLADQA"
/note="IS1_ORF1 e-value= 3.2e-11 fragment hit coverage=
37.24%, between model( 239 aa) positions 5; 93 length is
94aa with 2 gaps, 0 stops, absolute frame= Minus2"
CDS
complement(4612015..4611591)
/colour="255 0 0"
/evidence=predicted
/translation="GRQR FNVL GALNAV TKEvTSITNHTYINSHSMCLLAKLALLDP
VI--PISVILDNARYQKCQLVTDFAEIVD--IELVYLP SYSPHLNLIERLWRFVRKEC

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LYSKYYSDHSFKGAIQQCIDQCNTEHAKLTSLLSLKFQSFQK"
/note="IS630 e-value= 6.2e-18 fragment hit coverage=
38.56%, between model( 376 aa) positions 232; 376 length
is 142aa with 4 gaps, 0 stops, absolute frame= Minus2"
complement(4461124..4460748)
/colour="255 0 0"
/evidence=predicted
/translation="EHRKSEDFALCMQYLVGGLPQADKLHVVLNDLNTHspaalyKT
FNPDEALRILK-RIQFHYPKKGWSLNMIEFEFSALSRCNLRRIP-DIEQLRYEVTA
WEKRRNHDKATVNWLFTVDDARTKLS"
/note="IS630 e-value= 2.3e-07 fragment hit coverage=
32.45%, between model( 376 aa) positions 255; 376 length
is 126aa with 2 gaps, 0 stops, absolute frame= Minus2"
complement(4320520..4320258)
/colour="255 0 0"
/evidence=predicted
/translation="LFYFLMQCPLCGHPK-THKHGKTSKGSQRYRCPHCQQTFS-Etf
DTLCYRRQisPETIQTILQAHVEGSSLRGLSRITGVAYNTCVSVVR"
/note="IS1_ORF1 e-value= 1.7e-15 fragment hit coverage=
36.40%, between model( 239 aa) positions 1; 87 length is
88aa with 2 gaps, 0 stops, absolute frame= Minus2"
complement(4297825..4296789)
/colour="255 0 0"
/evidence=predicted
/translation="PMIKIDFTAEEIQQLNYERYHHPHPRVQRRMEVLYLKSQGLSHT
QICOLCQISRPTLAKEQLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH
PP-----RTSAEAQAVIEQLTGIKRSPHQIKAFLKRGCRYRKVGYVPGKSSL
-EKIEEQEQRHTRLEPLLeeAQRQERLVFFVDAAHFVHRAYLGF-VWCITRI-----
-----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL
DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPHNLIERLWRFVRKE
CLYSKYYADFPFAFKGAIQQCIDQCNGEHAKLTLSSLKQSFKK"
/note="IS630 e-value= 6.7e-25 complete sequence hit
coverage= 100%, between model( 376 aa) positions 1; 376
length is 346aa with 33 gaps, 0 stops, absolute frame=
Minus2"
complement(4297825..4296789)
/colour="255 0 0"
/evidence=predicted
/translation="PMIKIDFTAEEIQQLNYERYHHPHPRVQRRMEVLYLKSQGLSHT
QICOLCQISRPTLAKEQLRQYQQGG---IEGLKTLEYKGQPSLLNAHS-DSVRAYFEQH
PP-----RTSAEAQAVIEQLTGIKRSPHQIKAFLKRGCRYRKVGYVPGKSSL
-EKIEEQEQRHTRLEPLLeeAQRQERLVFFVDAAHFVHRAYLGF-VWCITRI-----
-----FIPSPS-GRQRFNVLGALDAITKDLVSVTNHTYINSHSMCLLLAKLALL
DPV-IPISVILDNARYQKCQLVTDFAEIVD--IELVYLPSPHNLIERLWRFVRKE
CLYSKYYADFPFAFKGAIQQCIDQCNGEHAKLTLSSLKQSFKK"
/note="IS630 e-value= 4.9e-24 complete sequence hit
coverage= 100%, between model( 376 aa) positions 1; 376
length is 346aa with 33 gaps, 0 stops, absolute frame=
Minus2"
complement(4297765..4297608)
/colour="255 0 0"
/evidence=predicted
/translation="HHPHPRVQRRMEVLYLKSQGLSHTQICOLCQISRPTLAKEQLRQY
QQGGIEGLK"
/note="IS481 e-value= 3.7e-09 fragment hit coverage=
15.10%, between model( 351 aa) positions 1; 53 length is
53aa with 0 gaps, 0 stops, absolute frame= Minus2"
complement(4135960..4135503)
/colour="255 0 0"
/evidence=predicted

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<translation="ACSRCRHTFT-DXSSQSEDIEGSQKPHGCMGSESSCTT-----"
WRISGASSQH---TDGDSSALE---RMGXVKSPSRGLAVSDPgDLAGKVRVRQ-L
QDYSIROCICQVLNYPRSVYYHARGQP----DESELKAAIAGVAGAYP-TYGYRR
TAQLQ---RQGYCVNKHKRVARLMRQIGIMAKTKVK-RKRTTNSEHSfpRYGNRVLNLS
--IDHPEQVWVADITYIRLQ-QEFVYLA VMDVFTRAIRGWHL SRH IDQQLTLRALNK
ALERAT---PEIHHS----DQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAER
LMRTIKEEEVD--LSDYRNFT EAYEHI EQFLEDvYMHKRIHSSLG YLTPCEYEQQWRQ
O"
/note="IS3_IS150_ORF2      e-value= 5e-28 complete sequence
hit coverage= 100%, between model( 389 aa) positions 1;
389 length is 353aa with 40 gaps, 2 stops, absolute
frame= Minus2"
CDS complement(3914146..3913149)
/colour="255 0 0"
/evidence=predicted
/translation="MGSESSCTTW RISGASSQHTDGDS--SALE RMGXVK----SPS
RGLAVSDPGDLAGKVRVRQLOQO-----DYSIROCICQVLNYPRSVYYHARGQ
PDESELKAAIAGVAGAYPTYGYRRITAQLQRQGYCVNKHKRVARLMRQIGIMAKTK-V-K
RKRTtnsehsfprYGNRVLNLSIDHPEQVWVADITYIRLQ--QEFVYLA VmDVFTRA
IRGWHL SRH IDQQLTLRALNKALE-RATPEIHHS DQGVQYAAAAYMQLLQQHQVQISM
AEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT EAYEHI EQFLEDvYMHKRIHSSLGY
LTPCEYEQQWRQ QNNHYCMNK"
/note="IS3_IS407_ORF2      e-value= 1.2e-11 complete sequence
hit coverage= 100%, between model( 344 aa) positions 1;
344 length is 333aa with 22 gaps, 1 stops, absolute
frame= Minus2"
CDS complement(3914050..3913176)
/colour="255 0 0"
/evidence=predicted
/translation="VKSPSRGLAVSDPGdLAGKVR---VRQLQQDYSIROCICQVLNY
PRSVYYHARGQPDESELKAAIAGV-AGAYPTYGYRRITAQLQRQGYCVNKHKRVARLM
RQIGIMAKTKVK---RKRTTNSEHSF-PRYGNRv1NLSIDHPEQVWVADITYIRL-
QEFVYLA VMDVFTRAIRGWHL SRH IDQQLTLRALNKALE---ATPEIHHS DQGV
QYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT--EAY
EHIEQFLEDvYMHKRIHSSLG YLTPCEYEQQWRQ"
/note="IS3_IS150_ORF1      e-value= 2.2e-46 complete sequence
hit coverage= 100%, between model( 306 aa) positions 1;
306 length is 292aa with 18 gaps, 0 stops, absolute
frame= Minus2"
CDS complement(3914026..3913140)
/colour="255 0 0"
/evidence=predicted
/translation="AVSDPGDLAGKVRVRQLOQDYSIROCICQVLNYPRSVYYHARGQ
PD-----ESELKAAIAGVAGAYPTYGYRRITAQLQRQGYC---VNHKRVARLMRQIGIMAKTKVKRKR-TTNSEHSFPRYGNRVLNLSIDHPEQVWVADIT
YI-----RLQO-----EFVYLA VMDVFTRAIRGWHL SRH ---IDQ
QLTLRALNKALE AT-PEIHHS DQGVQYAAA---AYMQLLQQHQVQISMAEVGQAWQ
NGYAERLMRTIKEEEVDLSD--YRNFT EAYEHI EQFLEDvYMHKRIHSSLG YLTPCE
YEQQWRQ QNNHYCMNKEDS"
/note="IS481 e-value= 2.7e-07 complete sequence hit
coverage= 100%, between model( 351 aa) positions 1; 351
length is 296aa with 57 gaps, 0 stops, absolute frame=
Minus2"
CDS complement(3914008..3913140)
/colour="255 0 0"
/evidence=predicted
/translation="----DLAGKVRVRQLOQDYSIROCICQVLNYP---RSQVYYHARg
QPDESELKA--AIAGV-----AGA---YPTYGYRRITAQLQRQGYCVNKHKRVARLM
RQIGIMAKTKVKRKR TTNSEHSFPRYGNRVL-NLSIDHPEQVWVADITYIRLQEFVY
LA VMDVFTRAIRGWHL SRH IDQQLTLRALNKALE ATPE-----IHHS DQGVQY
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AAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIKEEVDSLSDYrnFTEAYEHIE
QFLEDV--YMHKRIHSSLGYLTPCEYEQQWRQQNNHYCMNKEDS"
/note="IS3_IS51_ORF2      e-value= 3.7e-25 complete sequence
hit coverage= 100%, between model( 317 aa) positions 1;
317 length is 290aa with 30 gaps, 0 stops, absolute
frame= Minus2"
CDS complement(3914005..3913164)
/colour="255 0 0"
/evidence=predicted
/translation="--LAGKV--RVRQL-QQDYSIROICQVLNYPRSQVYYHARG-----
-----QPDESELKAAIAGVAGAYPTYGYRRITAQLQRQGY-----CVNHKRVARLM
RQIGIM--AKTKVKRK-RttmsehsfpRYGNRVLnlsIDHPEQVWVAD-ITYIRLQOE
FVYLAVVMDVFTRAIRGW-----LSRHIDQQLTLRALNK---ALERATPEIHH-SD
QGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIKEEVDSLSDYRNFTEA
YEHIEQFLEDvYMHKRIHSSLGYLTPCEYEQQWRQQNNH"
/note="IS3_IS2_ORF2      e-value= 3.7e-08 complete sequence
hit coverage= 100%, between model( 302 aa) positions 1;
302 length is 281aa with 34 gaps, 0 stops, absolute
frame= Minus2"
CDS complement(3913996..3913149)
/colour="255 0 0"
/evidence=predicted
/translation="KVRVROLOQDYSIROICQVLNYPRSQVYYHA-----RG
QPDESELKAAIAGV-AGAYPTYGYRRITAQLQRQGYCVNHKRVARLMRQIGIMAKTKV
KRKRTTNSEHSFPRYGNRVL-NLSIDHPEQVWVADITYIRLQOEFVYLVAVVMDVFTRA
IRGWHLSRHIRDQQLT-LRALNKALERATPE-----IHHSQGVQYAAAAYMQLLQQ
HQVQISMAEVGQAWQNGYAERLMRTIKEEVDSL---S-DYRNFTEAYEHIEQFLEDVY
MHKRIHSSLGYLTPCEYEQQWRQQNNHYCMNK"
/note="IS3_IS51_ORF1      e-value= 3e-51 complete sequence
hit coverage= 100%, between model( 307 aa) positions 1; 307
length is 283aa with 25 gaps, 0 stops, absolute frame=
Minus2"
hit
CDS complement(3913996..3913149)
/colour="255 0 0"
/evidence=predicted
/translation="KVRVROLOQDYSIROICQVLNYPRSQVYYHA-----RG
QPDESELKAAIAGV-AGAYPTYGYRRITAQLQRQGYCVNHKRVARLMRQIGIMAKTKV
KRKRTTNSEHSFPRYGNRVL-NLSIDHPEQVWVADITYIRLQOEFVYLVAVVMDVFTRA
IRGWHLSRHIRDQQLT-LRALNKALERATPE-----IHHSQGVQYAAAAYMQLLQQ
HQVQISMAEVGQAWQNGYAERLMRTIKEEVDSL---S-DYRNFTEAYEHIEQFLEDVY
MHKRIHSSLGYLTPCEYEQQWRQQNNHYCMNK"
/note="IS3_IS51_ORF1      e-value= 3.9e-53 complete sequence
hit coverage= 100%, between model( 307 aa) positions 1;
307 length is 283aa with 25 gaps, 0 stops, absolute
frame= Minus2"
CDS complement(3913993..3913179)
/colour="255 0 0"
/evidence=predicted
/translation="VRVROLQQDYSIROICQVLNYPRSQVYYHARG--QPD----ES
ELKAAI-AGVAGAYPTYGYRRITAQLQ-RQGYCVNHKRVARLMRQIGIMAKTKVKRKR
TTNSEHSfPRYGNRVLNLS-IDHPEQVWVADITYIRLQOEFVYLVAVVMDVFTRAIRGW
HLSRHIDQQLTLRALNKALERA-TPE--IHHSQGVQYAAAAYMQLLQQHQVQISMAE
VGQAWQNGYAERLMRTIK-EEEVDL-SDYRNFTEAYEHIEQFLEDVYMHKRIHSSLGY
LTPCEYEQQWR"
/note="IS3_IS3_ORF1      e-value= 7.6e-54 complete sequence
hit coverage= 100%, between model( 286 aa) positions 1;
286 length is 272aa with 15 gaps, 0 stops, absolute
frame= Minus2"
CDS complement(3913993..3913179)

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/colour="255 0 0"
/evidence=predicted
/translation="VRVRQLQODYSIRQICQVLNYPRSQVYYHARG--OPD-----ES
ELKAAI-AGVAGAYPTYGYRRITAQLO-RQGCVNKHKRVARLMRQIGIMAKTKVKRKRT
TTNSEHSfPRYGNRVLNLS-IDHPEQVWVADITYIRLQQEFVYLAVVMDVFTRAIRGW
HLSRHIDQQLTLRALNKALER-TPE--IHHSQGVQYAAAAYMQLLQQHQVQISMAE
VGQAWQNGYAERLMRTIK-EEEVDL-SDYRNFTTEAYEHIEQFLEDVYMHKRIHSSLGY
LTPCEYEQQWR"
/note="IS3_IS3_ORF1      e-value= 2e-54 complete sequence
hit
coverage= 100%, between model( 286 aa) positions 1; 286
length is 272aa with 15 gaps, 0 stops, absolute frame=
Minus2"
CDS
complement(3913981..3913167)
/colour="255 0 0"
/evidence=predicted
/translation="QLQODYSIRQICQVLNYPRSQVYYHARGQPDE-----SEL
KAAIAGVAGaypTYGYRRITAQLOQRQGCVNKHKRVARLMRQIGIMAKTKVKRKRTTNS
EHSFPRY---GNRVLNLSIDHPEQVWVADITYIRLQQEFVYLAVVMDVFTRAIRGWHL
SRHIDQQLTLRALNKALER---ATPE---IHHSQGVQYAAAAYMQLLQQHQVQISM
AEVGQAWQNGYAERLMRTIKEEEVDSLSDYRNFTTEAYEHIEQFLEDVYMHKRIHSSLGY
LTPCEYEQQWRQQNN"
/note="IS3_IS3_ORF2      e-value= 3.3e-65 complete sequence
hit coverage= 100%, between model( 288 aa) positions 1;
288 length is 272aa with 19 gaps, 0 stops, absolute
frame= Minus2"
CDS
complement(3913981..3913167)
/colour="255 0 0"
/evidence=predicted
/translation="QLQODYSIRQICQVLNYPRSQVYYHARGQPDE-----SEL
KAAIAGVAGaypTYGYRRITAQLOQRQGCVNKHKRVARLMRQIGIMAKTKVKRKRTTNS
EHSFPRY---GNRVLNLSIDHPEQVWVADITYIRLQQEFVYLAVVMDVFTRAIRGWHL
SRHIDQQLTLRALNKALER---ATPE---IHHSQGVQYAAAAYMQLLQQHQVQISM
AEVGQAWQNGYAERLMRTIKEEEVDSLSDYRNFTTEAYEHIEQFLEDVYMHKRIHSSLGY
LTPCEYEQQWRQQNN"
/note="IS3_IS3_ORF2      e-value= 1.2e-64 complete sequence
hit coverage= 100%, between model( 288 aa) positions 1;
288 length is 272aa with 19 gaps, 0 stops, absolute
frame= Minus2"
CDS
complement(3913978..3913173)
/colour="255 0 0"
/evidence=predicted
/translation="LQODYSIRQICQVLNYPRSQVYYHARGQP----DESELKAAIA
GVAGAYP-TYGYRRITAQLO---RQGCVNKHKRVARLMRQIGIMAKTKVK-RKRTTNS
EHSFPRYGNRVLNLS--IDHPEQVWVADITYIRLQ-QEFVYLAVVMDVFTRAIRGWHL
SRHIDQQLTLRALNKALERAT---PEIHHS----DQGVQYAAAAYMQLLQQHQVQISM
MAEVGQAWQNGYAERLMRTIKEEEVDSLSDYRNFTTEAYEHIEQFLEDVYMHKRIHSS
LGYLTPCEYEQQWRQQ"
/note="IS3_IS150_ORF2      e-value= 2.2e-46 fragment hit
coverage= 74.29%, between model( 389 aa) positions 101;
389 length is 269aa with 23 gaps, 0 stops, absolute
frame= Minus2"
CDS
complement(3913963..3913176)
/colour="255 0 0"
/evidence=predicted
/translation="SIRQICQVLNYPRSQVYYHARGQPDESELKAAIAGV-AGAYPT
GYRRITAQLOQRQGCVNKHKRVARLMRQIGIMAKTKVK---RKRTTNSSEHSF-PRYGN
Rv1NLSIDHPEQVWVADITYIRL--QEFVYLAVVMDVFTRAIRGWHLRSRHIDQQLTL
RALNKALER---ATPEIHHSQGVQYAAAAYMQLLQQHQVQISMMAEVGQAWQNGYAE
RLMRTIKEEEVDSLSDYRNFT--EAYEHIEQFLEDVYMHKRIHSSLGYLTPEYEQQWR

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Q"
/note="IS3_IS150_ORF1      e-value= 1.4e-49 fragment hit
coverage= 89.87%, between model( 306 aa) positions 32;
306 length is 263aa with 14 gaps, 0 stops, absolute
frame= Minus2"
CDS
complement(3913963..3913764)
/colour="255 0 0"
/evidence=predicted
/translation="SIRQICQVLNYPRSQVYYHARGQPDESELKAAIAVGAGAYPTYG
YRRITAQLQRQGYCVNHKRVARL"
/note="IS3_IS407_ORF2      e-value= 2e-15 fragment hit
coverage= 19.48%, between model( 344 aa) positions 80;
146 length is 67aa with 0 gaps, 0 stops, absolute frame=
Minus2"
CDS
complement(3913912..3913755)
/colour="255 0 0"
/evidence=predicted
/translation="YHARgQPDESELKAAIAVGAGAYPTYGYRRITAQLQRQGY-----
-CVNHKRVARLMRQ"
/note="IS3_IS2_ORF2      e-value= 9.1e-09 fragment hit
coverage= 18.87%, between model( 302 aa) positions 48;
104 length is 53aa with 5 gaps, 0 stops, absolute frame=
Minus2"
CDS
complement(3913846..3913164)
/colour="255 0 0"
/evidence=predicted
/translation="YPTYGYRRITAQLQRQGYCVNHKRVARLMRQIGIMAKTKVKRKR
TTNSEHSFPRYGNRVL-NLSIDHPEQVWVADITYIRLQQEFVYLA VVMDVFTRAIRGW
HLSRHIDQQLTLRALNKALERATPE-----IHHSDQGVQYAAAAYMQLLQQHQVQ
ISMAEVGQAWQONGYAERLMRTIKEEEVDLSDYrnfTEAYEHIEQFLEDV--YMHKRIH
SSLGYLTPCEYEQQWRQQNNH"
/note="IS3_IS51_ORF2      e-value= 1.9e-38 fragment hit
coverage= 74.76%, between model( 317 aa) positions 73;
309 length is 228aa with 11 gaps, 0 stops, absolute
frame= Minus2"
CDS
complement(3759763..3758637)
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAS
hLSDKRLDIILKILDGRRILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK
PQIAAGMIROLQGMGFCFELVLADSLYGEAQTNFVNVL EELKLPYILA IRSN HAVWLP
AEQAVFAEPWQS FERTFSNGT-----TETRYR
QEIIYGQRHHQKRyWLTTDPQTL PENSTS-----YVMAA
APE----IKLDEIGDCYGFRTWIEYGLQSKD-TLGWADFRMTHYEQIEKWWEIVMSA
FLMVS LFADVF NDS-----CPVAHQHFAQHPwWDNQNG
WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"
/note="IS4      e-value= 9.9e-07 complete sequence hit
coverage= 100%, between model( 486 aa) positions 1; 486
length is 376aa with 117 gaps, 0 stops, absolute frame=
Minus2"
CDS
complement(3759763..3759069)
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAS
hLSDKRLDIILKILDGRRILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK
PQIAAGMIROLQGMGFCFELVLADSLYGEAQTNFVNVL EELKLPYILA IRSN HAVWLP
AEQAVFAEPWQS FERTFSNGTETRYrQEIIYGqrhhQKRy"
/note="IS4      e-value= 4.7e-14 fragment hit coverage="

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51.23%, between model( 486 aa) positions 1; 249 length is  
232aa with 27 gaps, 0 stops, absolute frame= Minus2"  
CDS complement(3688744..3687618)  
/colour="255 0 0"  
/evidence=predicted  
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAS  
hLSDkRLDIILKILDGRRLILLID-----ETGDCCKKGKSTDYVKR  
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK  
PQIAAGMIRQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
AEQAVFAEPWQSFERTFSNGT-----TTRYR  
QEIIYGQRHHQKRyWLTTDPQTL PENSTS-----YVMAA  
APE----IKLDEIGDCYGFRTWIEYGLKQSKD-TLGWADFRMTHYEQIEKWWEIVMSA  
FLMVSLFADVFNDS-----CPVAHQHFAQHPwWDNQNG  
WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"  
/note="IS4 e-value= 9.9e-07 complete sequence hit  
coverage= 100%, between model( 486 aa) positions 1; 486  
length is 376aa with 117 gaps, 0 stops, absolute frame= Minus2"  
CDS complement(3688744..3688050)  
/colour="255 0 0"  
/evidence=predicted  
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAS  
hLSDkRLDIILKILDGRRLILLID-----ETGDCCKKGKSTDYVKR  
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK  
PQIAAGMIRQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
AEQAVFAEPWQSFERTFSNGTTETRYrQEIIYGqrhhOKRY"  
/note="IS4 e-value= 4.7e-14 fragment hit coverage= 51.23%, between model( 486 aa) positions 1; 249 length is 232aa with 27 gaps, 0 stops, absolute frame= Minus2"  
CDS complement(3511168..3510495)  
/colour="255 0 0"  
/evidence=predicted  
/translation="SXGICMKCPECGGQH-IHKNGHRR-GKQNHICVTCGRQFL--ST  
YSKRGYSDWTKRLCLRMVNGMGLKGIERVIGVAHTTVIHWVQQVGv11PNAYDPDDI  
PQ-----VGELDELETFGKCRNKVWIW-TVVDHFHPG--ILGWVVGDHSA  
ETFRPLWqaIVCWQCF FWVSDGNPVYpgFIP E gDQIVSKTYMTRVEGENTRLRHYLAR  
LHRKTLCKSYKSVDMLKHSIRLL---IHYL"  
/note="IS1\_ORF1 e-value= 3.5e-42 complete sequence hit  
coverage= 100%, between model( 239 aa) positions 1; 239  
length is 225aa with 22 gaps, 1 stops, absolute frame= Minus2"  
CDS complement(3511168..3510495)  
/colour="255 0 0"  
/evidence=predicted  
/translation="SXGICMKCPECGGQH-IHKNGHRR-GKQNHICVTCGRQFL--ST  
YSKRGYSDWTKRLCLRMVNGMGLKGIERVIGVAHTTVIHWVQQVGv11PNAYDPDDI  
PQ-----VGELDELETFGKCRNKVWIW-TVVDHFHPG--ILGWVVGDHSA  
ETFRPLWqaIVCWQCF FWVSDGNPVYpgFIP E gDQIVSKTYMTRVEGENTRLRHYLAR  
LHRKTLCKSYKSVDMLKHSIRLL---IHYL"  
/note="IS1\_ORF1 e-value= 1.9e-41 complete sequence hit  
coverage= 100%, between model( 239 aa) positions 1; 239  
length is 225aa with 22 gaps, 1 stops, absolute frame= Minus2"  
CDS complement(3511168..3510489)  
/colour="255 0 0"  
/evidence=predicted  
/translation="SXGICMKCPECGGQH-IHKNGHRR-GKQNHICVTCGR----QFL  
STYSKRGysdwTKRLCLRMVNGMGLKGIERVIGVAHTTVIHWVQQV--GVLLPNAYD  
PDDIPQVGELDELETFGKCRNKVWIW-TVVDHFHPGILGWVVGDHSAETFRPLWQAIV  
CWQ-CFFFWVSDGNPVYPGFIPEG----DQIVSKTYMTRVEGENTRLRHYLARLHRKTL

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CYSKSVVMLKHSIRLLI-HYLKF"
/note="IS1_ORF2 e-value= 3.2e-29 complete sequence hit
coverage= 100%, between model( 237 aa) positions 1; 237
length is 227aa with 14 gaps, 1 stops, absolute frame=
Minus2"
CDS
complement(3510889..3510489)
/colour="255 0 0"
/evidence=predicted
/translation="DPDDIPQVGELDELETFGKKRNKVWIWTVVDFHHPGILGWVVG
DHSAAETFRPLWQAIVCWQ-CFFWVSDGNPVYPGFIPEG----DQIVSKTYMTRVEGEN
TRLRHYLARLHRKTLCSKSVVMLKHSIRLLI-HYLKF"
/note="IS1_ORF2 e-value= 8.3e-32 fragment hit coverage=
59.07%, between model( 237 aa) positions 98; 237 length
is 134aa with 6 gaps, 0 stops, absolute frame= Minus2"
CDS
complement(3407053..3406647)
/colour="255 0 0"
/evidence=predicted
/translation="MLLVRPISTESLRLLHRIYHSSRHQVRQRAHCLILFAQGWPPY
TLASLFSVSPKTVDYNWLKAWNNRG---FAGLYNHPGRGRKPMFNPDQQQIYEWT-QA
SPIQ-----LNQVLAQIEQQWSVRVSKATVKRVLKQMDMSWHR"
/note="IS630 e-value= 8.7e-15 fragment hit coverage=
39.63%, between model( 376 aa) positions 1; 149 length is
136aa with 13 gaps, 0 stops, absolute frame= Minus2"
CDS
complement(3406993..3406656)
/colour="255 0 0"
/evidence=predicted
/translation="SSRHQVRQRAHCLILFAQGWPPYTLASLFSVSPKTVDYNWLKAW
NNRGFAGLYNH---PGRGRKPMfNPDQQQIYEWTQASPIQLNQVLAQIEQQWSVR---
-VSKATVKRVLKQMDMS"
/note="IS481 e-value= 3.5e-09 fragment hit coverage=
33.62%, between model( 351 aa) positions 1; 118 length is
113aa with 6 gaps, 0 stops, absolute frame= Minus2"
CDS
complement(2632693..2631567)
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS
hLSDKRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK
PQIAAGMIRQLQGMGFCVELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP
AEQAVFAEPWQSFERTFSNGT-----TTRYR
QEIIYGQRHHQKRyWLLTDPQTLPENSTS-----YVMAA
APE----IKLDEIGDCYGFRTWIEYGLKQSKD-TLGWADFRMTHYEQIEKWWEIVMSA
FLMVSLFADVFNDS-----CPVAHQHFAQHPwWDNQNG
WKNLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"
/note="IS4 e-value= 9.9e-07 complete sequence hit
coverage= 100%, between model( 486 aa) positions 1; 486
length is 376aa with 117 gaps, 0 stops, absolute frame=
Minus2"
CDS
complement(2632693..2631999)
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS
hLSDKRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK
PQIAAGMIRQLQGMGFCVELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP
AEQAVFAEPWQSFERTFSNGTTETRYrQEIIYGqrhhQRY"
/note="IS4 e-value= 4.7e-14 fragment hit coverage=
51.23%, between model( 486 aa) positions 1; 249 length is
232aa with 27 gaps, 0 stops, absolute frame= Minus2"
CDS
complement(2586391..2586240)

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/colour="255 0 0"
/evidence=predicted
/translation="QLCLILDNNPTHKG-KMRSQLAIHLEqmgltqsiQVEFLYLPYS
SPKLNLE"
/note="IS630 e-value= 4.3e-06 fragment hit coverage=
11.70%, between model( 376 aa) positions 279; 322 length
is 51aa with 1 gaps, 0 stops, absolute frame= Minus2"
CDS complement(2459947..2458710)
/colour="255 0 0"
/evidence=predicted
/translation="IRIPLNLPDI--RVLELSKTERGDWL-----IKIESTLQGTTCH
HQCGREITDL-HCHDQ-PFRIRHPLFEPVYLEIRPKRYRCKYCDDhpTTTQHLEWH
EPRSPNTKAYERWLLRILIN-STVSDVARKLGVSEDIVSGIIDRWIAAQVDWSEYADL
KVMGMDEISLKRG--HR---DFVVLITIPTTdgVDILAVLADRQQTANFLQSIP-I
DLRQTIERVCTDMYQGFVSAVREQLPQAKIVIDRFHVTKAYRNCADTVRKREVKRLRR
ELS-----KQEYD-----SIKGAMWPFRKRPNLKES-EQOLLERLFA-
YSPQLKQAYNLREKLTQIFEGRTKHGAKcAIRAWCKQVLKSDiKEFDCFLTT
INNWMDDEMNTNYFLEG-WTSGFVEGFNNRVKVLKRCYGYGIFDIERLFQRISLDLNGYQT
FAVTXTL"
/note="ISL3 e-value= 1.8e-43 complete sequence hit
coverage= 100%, between model( 451 aa) positions 1; 451
length is 413aa with 44 gaps, 1 stops, absolute frame=
Minus2"
CDS complement(2459788..2458710)
/colour="255 0 0"
/evidence=predicted
/translation="RIRHPLFEPVYLEIRPKRYRCKYCDDhpTTTQHLEWEPRSP
NTKAYERWLLRILIN-STVSDVARKLGVSEDIVSGIIDRWIAAQVDWSEYADLKVMGM
DEISLKRG--HR---DFVVLITIPTTdgVDILAVLADRQQTANFLQSIP-IDLRQT
IERVCTDMYQGFVSAVREQLPQAKIVIDRFHVTKAYRNCADTVRKREVKRLRRELSS
-----KQEYD-----SIKGAMWPFRKRPNLKES-EQOLLERLFA-
YSPQLKQAYNLREKLTQIFEGRTKHGAKcAIRAWCKQVLKSDiKEFDCFLTTINNW
DEMNTNYFLEG-WTSGFVEGFNNRVKVLKRCYGYGIFDIERLFQRISLDLNGYQTFAVTX
TL"
/note="ISL3 e-value= 1e-49 fragment hit coverage= 86.03%,
between model( 451 aa) positions 64; 451 length is 360aa
with 34 gaps, 1 stops, absolute frame= Minus2"
CDS complement(2413129..2412849)
/colour="255 0 0"
/evidence=predicted
/translation="PMShLIDTLKQVPDFRSARGRTHPLWLLLLLMVMGMLAGYQGYC
PLETFTSDYQQPLCELLGLENF----QVPSHCTFRRVMKGLDFQSLSHQFEAWM"
/note="ISAs1 e-value= 1.2e-14 fragment hit coverage=
25.45%, between model( 389 aa) positions 1; 99 length is
94aa with 5 gaps, 0 stops, absolute frame= Minus2"
CDS complement(2413129..2412096)
/colour="255 0 0"
/evidence=predicted
/translation="PMShLIDTLKQVPDFRSARGRTHPLWLLLLLMVMGMLAGYQGYC
PLETFTSDYQQPLCELLGLENF----QVPSHCTFRRVMKGLDFQSLSHQFEAWM1sk
aqthspDNYAASMDGK-RIC---QGLTDENGKQRFVG---LVSIFAVEAGITLKLEAL
TQEDNSEIKVVQALLETLOLDG-LLITMDALHAQKNTSAS-CGFGX-----
XLSYRRXAQSGPSLRPPPDLL-XVSXTHGxayplHTEXRTRGTSVYPGLXACRHSPTR
-VGSHSLGALCPAMGYSSRQG---VSQH----GLLHQFS-----CHLTPS
LAISGPRALGHXKS-----VALAEGCGLWXRXLSTRGXTSTAQLVSAXNHCD
XYASKRLSIPQ"
/note="ISAs1 e-value= 7e-07 complete sequence hit
coverage= 100%, between model( 389 aa) positions 1; 389
length is 345aa with 59 gaps, 13 stops, absolute frame=
Minus2"

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CDS complement(2404702..2404278)
/colour="255 0 0"
/evidence=predicted
/translation="GRQRFNVLGALNAVTKEvTSITNHTYINSHSMCLLLAKLALLDP
VI--PISVILDNARYQKSQLVTDFAEIVD--IELVYLPSYSPLNLIERLWRFVRKEC
LYSKYYSDFHFSFKGAIQQCIDQCNTEHKAKLTSLLKFQSFQK"
/note="IS630 e-value= 6.2e-18 fragment hit coverage=
38.56%, between model( 376 aa) positions 232; 376 length
is 142aa with 4 gaps, 0 stops, absolute frame= Minus2"
CDS complement(2284996..2284359)
/colour="255 0 0"
/evidence=predicted
/translation="MASKTTNVkPVVVSLLWKLSSKSELIHPLKAXSISYCLKRYLWQV
L-----PGS-----VMFLKAGYKSTXTVsMKQCLVLXTYHQKKGR-----
---LTLQCDDEMWSFVNDKSNKQWIWLALDVITREIVGVYVGARSQGARQLWNSLPGI
YRQCAVaYTDFWDAYGCVFPKQ-RHQAVGKETGOTCYIERFNCTMRQRVSRLVRKTLS
FSKKLENHIGAIWMFVHHYNAS"
/note="IS1_ORF2 e-value= 4.6e-13 complete sequence hit
coverage= 100%, between model( 237 aa) positions 1; 237
length is 213aa with 27 gaps, 3 stops, absolute frame=
Minus2"
CDS complement(2284744..2284368)
/colour="255 0 0"
/evidence=predicted
/translation="DEMWSFVNDKSNKQWIWLALDVITREIVGVYVGAS---RSKQGA
RQLwNSLPGIYRQCAVAYTDFWDAYgCVFPKQRHQAVGKEtgOTCYIERFNCTMRQRV
SRLVRKTLSFSKKLENHIGAIWMF---VHHY"
/note="IS1_ORF1 e-value= 4.6e-14 fragment hit coverage=
53.97%, between model( 239 aa) positions 111; 239 length
is 126aa with 7 gaps, 0 stops, absolute frame= Minus2"
CDS complement(2284744..2284359)
/colour="255 0 0"
/evidence=predicted
/translation="DEMWSFVNDKSNKQWIWLALDVITREIVGVYVGARSQGARQLW
NSLPGIYRQCAVaYTDFWDAYGCVFPKQ-RHQAVGKETGOTCYIERFNCTMRQRVSRL
VRKTLSFSKKLENHIGAIWMFVHHYNAS"
/note="IS1_ORF2 e-value= 6.2e-32 fragment hit coverage=
54.43%, between model( 237 aa) positions 109; 237 length
is 129aa with 1 gaps, 0 stops, absolute frame= Minus2"
CDS complement(2088655..2088024)
/colour="255 0 0"
/evidence=predicted
/translation="TQTLDRXTXRAM----PTAYDSLTLQWELLEPLIPAAK---
---PGGRPRTTDMRSVLNAIFYLVVTGCQWRQLPHDFPCWSTVYSYFRRWRDDGTWVH
INEHLMQERVSEDRHPSPSAAICDAQSVKVG--NPR-----
-----CHTNS---LIEXPLXSKHPR-----YKNIPLEKPPPSGR
GYXYAQIKRSP-----VPQ-----XNQSFCLXKAFLGPAAIALP
DXVLDyETAVQSATHSQAIEP"
/note="IS5_IS1031 e-value= 3.4e-16 complete sequence hit
coverage= 100%, between model( 295 aa) positions 1; 295
length is 211aa with 86 gaps, 7 stops, absolute frame=
Minus2"
CDS complement(2088613..2088297)
/colour="255 0 0"
/evidence=predicted
/translation="YDSLTLQWELLEPLIPAAK-----PGGRPRTTDMRSVLNA
IFYLVVTGCQWRQLPHDFPCWSTVYSYFRRWRDDGTWVHINEHLMQERVSEDRHPSP
SAAICDAQSVK"
/note="IS5_IS1031 e-value= 7.2e-51 fragment hit coverage=
38.31%, between model( 295 aa) positions 20; 132 length

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is 106aa with 7 gaps, 0 stops, absolute frame= Minus2"
CDS complement(2088604..2088366)
/colour="255 0 0"
/evidence=predicted
/translation="DLTTLQWELLEPLIPAAKP-GGRPRT-TDMRSVLNAIFYLVVTG
CQRQLPHDFPCWSTVSYFRRWRDDGTWVHINEHLM"
/note="IS5_IS427 e-value= 9.2e-19 fragment hit coverage=
27.70%, between model( 296 aa) positions 125; 206 length
is 80aa with 2 gaps, 0 stops, absolute frame= Minus2"
CDS complement(2087236..2086668)
/colour="255 0 0"
/evidence=predicted
/translation="SQISIRKGLGM-----RDKY-----Q-----
-----QRATP-----IIQVTH-----IWNWY-----
-----HSI-----GFDGGKMKVGRKRHVLD
TLGLVLMVMVTAANISDQR-GAKMLFWKARRQGas1SRLVRIWADAGYQGQAFMKWVM
DRFQYVLEVVIKRSDNLAGFQVVPKRWIVERTFGWLLWSRRLNKDYEVLTRTEALAYV
AMIRLMVRRLAQEYXNFNSNLX"
/note="IS5_IS1031 e-value= 2.9e-19 complete sequence hit
coverage= 100%, between model( 295 aa) positions 1; 295
length is 190aa with 108 gaps, 2 stops, absolute frame=
Minus2"
CDS complement(2087131..2086668)
/colour="255 0 0"
/evidence=predicted
/translation="GFDGGKMKVGRKRHVLDLGLVLMVMVTAANISDQR-GAKMLF
WKARRQGas1SRLVRIWADAGYQGQAFMKWVMDRFQYVLEVVIKRSDNLAGFQVVPKRW
IVERTFGWLLWSRRLNKDYEVLTRTEALAYVAMIRLMVRRLAQEYXNFNSNLX"
/note="IS5_IS1031 e-value= 2.2e-60 fragment hit coverage=
51.86%, between model( 295 aa) positions 143; 295 length
is 155aa with 1 gaps, 2 stops, absolute frame= Minus2"
CDS complement(1894558..1894341)
/colour="255 0 0"
/evidence=predicted
/translation="RIRFYVYIPKHTSWLNQIECWFSILVRRLIRRGNFTSKDDLQORI
LEFIEYFNhtMAKPFQWQFKGFQPRLXLM"
/note="IS630 e-value= 4e-10 fragment hit coverage=
19.15%, between model( 376 aa) positions 305; 376 length
is 73aa with 0 gaps, 1 stops, absolute frame= Minus2"
CDS complement(1894510..1894401)
/colour="255 0 0"
/evidence=predicted
/translation="IECWFSILVRRLIR--RGNFTSKDDLQQRILEFIEYFNH"
/note="IS3_IS150_ORF2 e-value= 2e-08 fragment hit
coverage= 10.03%, between model( 389 aa) positions 329;
367 length is 37aa with 2 gaps, 0 stops, absolute frame=
Minus2"
CDS complement(1226248..1225905)
/colour="255 0 0"
/evidence=predicted
/translation="KYIVTLTPEERSELIQLTRRRTLSARKMKRAQILMLADEGHKDD
TITQMLNAGISTVHRTRQKFVEGG---VEfALNERPRPGGQKKLDSKAEALLIATACS
DPPTG---CCRWTMQLLAE"
/note="IS630 e-value= 1.2e-15 fragment hit coverage=
32.18%, between model( 376 aa) positions 1; 121 length is
115aa with 7 gaps, 0 stops, absolute frame= Minus2"
CDS complement(1119469..1119321)
/colour="255 0 0"
/evidence=predicted
/translation="LMNSGLFRLPGKKHLIQGFERPDVVMDVTETPIERPQKGQKAY

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YAGKKR"
/note="IS5_ISL2      e-value= 1.8e-17 fragment hit coverage=
19.23%, between model( 260 aa) positions 80; 129 length
is 50aa with 0 gaps, 0 stops, absolute frame= Minus2"
complement(669352..668715)
/colour="255 0 0"
/evidence=predicted
/translation="MASKTTNVkPVVVSLLWKLSSKSELIHPLKAXSISYCLKRYLWQV
L-----PGS-----VMFLKAGYKSTXTVsMKQCLVLXTYHQKKGR-----
---LTLQCDEMWSFVNDKSNKQWIWLALDVITREIVGVYVGARSQGARQLWNNSLPGI
YRQCAVaYTDFWDAYGCVFPKQ-RHQAVGKETGOTCYIERFNCTMRQRVSRLVRKTLS
FSKKLENHIGAIWMFVHHYNAS"
/note="IS1_ORF2      e-value= 4.6e-13 complete sequence hit
coverage= 100%, between model( 237 aa) positions 1; 237
length is 213aa with 27 gaps, 3 stops, absolute frame=
Minus2"
CDS complement(669100..668724)
/colour="255 0 0"
/evidence=predicted
/translation="DEMWSFVNDKSNKQWIWLALDVITREIVGVYVGAS---RSKQGA
RQLwNSLPGIYRQCAVAYTDFWDAYGCVFPKQ-RHQAVGKETgOTCYIERFNCTMRQRV
SRLVRKTLSFSKKLENHIGAIWMF---VHHY"
/note="IS1_ORF1      e-value= 4.6e-14 fragment hit coverage=
53.97%, between model( 239 aa) positions 111; 239 length
is 126aa with 7 gaps, 0 stops, absolute frame= Minus2"
CDS complement(669100..668715)
/colour="255 0 0"
/evidence=predicted
/translation="DEMWSFVNDKSNKQWIWLALDVITREIVGVYVGARSQGARQLW
NSLPGIYRQCAVaYTDFWDAYGCVFPKQ-RHQAVGKETGOTCYIERFNCTMRQRVSRL
VRKTLSFSKKLENHIGAIWMFVHHYNAS"
/note="IS1_ORF2      e-value= 6.2e-32 fragment hit coverage=
54.43%, between model( 237 aa) positions 109; 237 length
is 129aa with 1 gaps, 0 stops, absolute frame= Minus2"
CDS complement(557656..557520)
/colour="255 0 0"
/evidence=predicted
/translation="WQTDGWEGYSRQLANE---VIHHVSKALTQRLERTNGILRQOTS
RWHRR"
/note="IS1_ORF2      e-value= 1.2e-12 fragment hit coverage=
20.68%, between model( 237 aa) positions 164; 212 length
is 46aa with 3 gaps, 0 stops, absolute frame= Minus2"
CDS complement(522460..522219)
/colour="255 0 0"
/evidence=predicted
/translation="VKLAELIPWESFESEYADQFSQ---TMGAPAKPFRVALGTLIIK
EKLGISDAETVEQIRENPYLQYFLGFSEYRESAPFDASML"
/note="IS5_IS5      e-value= 2.6e-06 fragment hit coverage=
19.91%, between model( 422 aa) positions 23; 106 length
is 81aa with 3 gaps, 0 stops, absolute frame= Minus2"
CDS complement(481126..480390)
/colour="255 0 0"
/evidence=predicted
/translation="----TGVYKRTFkpMLHAWHTYHLSRSN--AGRPPKLCRCDQL
LVALQYWREYRTYFHIAGDWEVSESTVCRIVHQVETALMNSGLFRLPGQKSLLQGFER
PDVVVMDVTETPIERPQTROKAYYSGKRDIPSNTRLSLTATLXRLSALT-----
--LVQVVGMIFrssrfqvsISIQCIPRVCKIADIKGLOPII--PTAM---FLSRSHNT
VNXLPCSESITVLXVRNEWALNTLIAAXRFSEFCRSAIAIVVVATRCGVTX"
/note="IS5_ISL2      e-value= 1.9e-21 complete sequence hit
coverage= 100%, between model( 260 aa) positions 1; 260

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length is 246aa with 23 gaps, 5 stops, absolute frame=
Minus2"
CDS complement(481066..480756)
/colour="255 0 0"
/evidence=predicted
/translation="SRSNAGRPPKLCRCDQLLVALQYWREYRTYFHIAGDWEVSESTV
CRIVHQVETALMNSGLFRLPGQKSLLQGFERPDVVVMDVTETPIERPQTROKAYYSGK
KR"
/note="IS5_ISL2      e-value= 9.3e-44 fragment hit coverage=
40%, between model( 260 aa) positions 26; 129 length is
104aa with 0 gaps, 0 stops, absolute frame= Minus2"
CDS complement(475153..474390)
/colour="255 0 0"
/evidence=predicted
/translation="SPYQHLSLYLKLRSHMLTHWESIESQA-MQENWSYAEFLLAL
CETKAQRREQARLKRALTEARLPNA-KSFTNFDFSHCPQLNPAPLMQLAAdPGWLERA
ENCLILGPSVGKTHLATGVSKKMLEFGKRVKFFAANALVQHLOQAKLQLQLH-PMLK
KLDRYDLLVLDDLGYCKKSEAETSVLFELIAHRYERKSLLITANQPFSQWDDIFT-DS
MMAVAIIDRLIHHGLIIKIQADSYRRKSATQRTAQTSPPQ"
/note="IS21_ORF2      e-value= 7.2e-80 complete sequence hit
coverage= 100%, between model( 258 aa) positions 1; 258
length is 255aa with 4 gaps, 0 stops, absolute frame=
Minus2"
CDS complement(475153..474390)
/colour="255 0 0"
/evidence=predicted
/translation="SPYQHLSLYLKLRSHMLTHWESIESQA-MQENWSYAEFLLAL
CETKAQRREQARLKRALTEARLPNA-KSFTNFDFSHCPQLNPAPLMQLAAdPGWLERA
ENCLILGPSVGKTHLATGVSKKMLEFGKRVKFFAANALVQHLOQAKLQLQLH-PMLK
KLDRYDLLVLDDLGYCKKSEAETSVLFELIAHRYERKSLLITANQPFSQWDDIFT-DS
MMAVAIIDRLIHHGLIIKIQADSYRRKSATQRTAQTSPPQ"
/note="IS21_ORF2      e-value= 1.9e-80 complete sequence hit
coverage= 100%, between model( 258 aa) positions 1; 258
length is 255aa with 4 gaps, 0 stops, absolute frame=
Minus2"
CDS complement(466177..466083)
/colour="255 0 0"
/evidence=predicted
/translation="AERG--ITLVELPSYSPHLNLIERLWQFMKYQWI"
/note="IS630 e-value= 1.7e-09 fragment hit coverage=
9.04%, between model( 376 aa) positions 300; 333 length
is 32aa with 2 gaps, 0 stops, absolute frame= Minus2"
CDS complement(339451..339123)
/colour="255 0 0"
/evidence=predicted
/translation="MVENRRGNHTVTRLTVHIVWVTKYRYQVLKGEVQKRCRELLIQI
CDAEDIRILKGVVSKDHVHMLIEYPPSKSISDIVKCLKGRTSRRLQQEYREXEKRYWG
KHLWAIGY"
/note="IS605 e-value= 3e-25 fragment hit coverage=
72.37%, between model( 152 aa) positions 1; 110 length is
110aa with 0 gaps, 1 stops, absolute frame= Minus2"
CDS complement(339451..338973)
/colour="255 0 0"
/evidence=predicted
/translation="MVENRRGNHTVTRLTVHIVWVTKYRYQVLKGEVQKRCRELLIQI
CDAEDIRILKGVVSKDHVHMLIEYPPSKSISDIVKCLKGRTSRRLQQEYREXEKRYWG
KHLWAIGYGAWSTGnISEQMVEEYLEHHrlvsnnDLDTFMLEXIrTTLVRGTGLSVDK
"
/note="IS605 e-value= 2.6e-17 complete sequence hit
coverage= 100%, between model( 152 aa) positions 1; 152

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length is 160aa with 0 gaps, 2 stops, absolute frame= Minus2"

CDS complement(339448..339063)  
/colour="255 0 0"  
/evidence=predicted  
/translation="VENRGNHTVTRLTVHIVWVTKYRYQVLKGEVKRCRELLI-QI CDAEDIRILKGVVSKDHVHLIEYPPSKSISDIVKCLKGRTSRRLQQEYREXEKRYWG KHLWAIGYGAWSTGNISEQMVEEYLEHH"  
/note="IS200 e-value= 1.2e-47 fragment hit coverage= 84.42%, between model( 154 aa) positions 1; 130 length is 129aa with 1 gaps, 1 stops, absolute frame= Minus2"

CDS complement(339448..339015)  
/colour="255 0 0"  
/evidence=predicted  
/translation="VENRGNHTVTRLTVHIVWVTKYRYQVLKGEVKRCRELLI-QI CDAEDIRILKGVVSKDHVHLIEYPPSKSISDIVKCLKGRTSRRLQQEYREXEKRYWG KHLWAIGYGAWSTGNISEQMVEEYLEHHRLVSNNDL-----DTFMLEXI"  
/note="IS200 e-value= 1.5e-46 complete sequence hit coverage= 100%, between model( 154 aa) positions 1; 154 length is 145aa with 9 gaps, 2 stops, absolute frame= Minus2"

CDS complement(339448..339063)  
/colour="255 0 0"  
/evidence=predicted  
/translation="VENRGNHTVTRLTVHIVWVTKYRYQVLKGE-VQKRCRELLIQI CDAEDIRILKGVVSKDHVHLIEYPPSKSISDIVKCLKGRTSRRLQQEYREXEKRYWG KHLWAIGYGAWSTGNISEQMVEEYLEHH"  
/note="IS200\_IS605 e-value= 1.3e-45 fragment hit coverage= 84.97%, between model( 153 aa) positions 1; 130 length is 129aa with 1 gaps, 1 stops, absolute frame= Minus2"

CDS complement(339448..338994)  
/colour="255 0 0"  
/evidence=predicted  
/translation="VENRGNHTVTRLTVHIVWVTKYRYQVLKGE-VQKRCRELLIQI CDAEDIRILKGVVSKDHVHLIEYPPSKSISDIVKCLKGRTSRRLQQEYREXEKRYWG KHLWAIGYGAWSTGNISEQMVEEYLEHHRLVSNNDLDTFMLEXIRTLVLRG"  
/note="IS200\_IS605 e-value= 4.2e-45 complete sequence hit coverage= 100%, between model( 153 aa) positions 1; 153 length is 152aa with 1 gaps, 2 stops, absolute frame= Minus2"

CDS complement(323713..323475)  
/colour="255 0 0"  
/evidence=predicted  
/translation="RNQQHYIRQLTAIKLLNEGHSLTQVSEQVGCSYDTLTRWMDKY LDGGIQLVQSI--RHQKPSRLSPEEQQLKEMVLTQR"  
/note="IS481 e-value= 6.3e-08 fragment hit coverage= 23.36%, between model( 351 aa) positions 1; 82 length is 80aa with 2 gaps, 0 stops, absolute frame= Minus2"

CDS complement(323686..323280)  
/colour="255 0 0"  
/evidence=predicted  
/translation="RLTAIKLLNEGHSLTQVSEQVGCSYDTLTRWMDKYLDGG---LQ GLVQSLRHQKPSRLSPEEQQLKEMVLTQRPTDYGIDRNMWTGAILAVVIEQRFEVQL KDSRIYELLSELGLSYQRAHRDYA--NADLNAQKEWVA"  
/note="IS630 e-value= 9.2e-30 fragment hit coverage= 37.50%, between model( 376 aa) positions 30; 170 length is 136aa with 5 gaps, 0 stops, absolute frame= Minus2"

CDS complement(322042..321891)  
/colour="255 0 0"

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/evidence=predicted
/translation="QLCLILDNNPTHKG-KMRSQLAIHLEqmgltqsiQVEFLYLPY
SPKLNLV"
/note="IS630 e-value= 4.3e-06 fragment hit coverage=
11.70%, between model( 376 aa) positions 279; 322 length
is 51aa with 1 gaps, 0 stops, absolute frame= Minus2"
complement(259486..259350)
/colour="255 0 0"
/evidence=predicted
/translation="WQTDGWEGYARQLPDE---VVHEVSKALTQRLERTNGIVRQQTG
RWHRR"
/note="IS1_ORF2 e-value= 1.8e-11 fragment hit coverage=
20.68%, between model( 237 aa) positions 164; 212 length
is 46aa with 3 gaps, 0 stops, absolute frame= Minus2"
complement(127654..127374)
/colour="255 0 0"
/evidence=predicted
/translation="PMSHLIDTLKQVPDFRSARGRTHPLWLLLLLVMGMLAGYQGYC
PLETFTSDYQQPLCELLGLENF----QVPSHCTFRRVMKGLDFQSLSHQFEAWM"
/note="ISAs1 e-value= 1.2e-14 fragment hit coverage=
25.45%, between model( 389 aa) positions 1; 99 length is
94aa with 5 gaps, 0 stops, absolute frame= Minus2"
complement(105898..105813)
/colour="255 0 0"
/evidence=predicted
/translation="ITYHKLFHTEWECKYRVVFIPKYCQKCIY"
/note="IS200 e-value= 2.1e-06 fragment hit coverage=
18.83%, between model( 154 aa) positions 1; 29 length is
29aa with 0 gaps, 0 stops, absolute frame= Minus2"
complement(105898..105807)
/colour="255 0 0"
/evidence=predicted
/translation="ITYHKLFHTEWECKYRVVFIPKYCQKCIYSN"
/note="IS200_IS605 e-value= 4.7e-06 fragment hit
coverage= 20.26%, between model( 153 aa) positions 1; 31
length is 31aa with 0 gaps, 0 stops, absolute frame=
Minus2"
complement(105892..105807)
/colour="255 0 0"
/evidence=predicted
/translation="---YHKLHFTEWECKYRVVFIPKYCQKCIYSN"
/note="IS605 e-value= 9.3e-06 fragment hit coverage=
21.05%, between model( 152 aa) positions 1; 32 length is
29aa with 3 gaps, 0 stops, absolute frame= Minus2"
complement(62245..61035)
/colour="255 0 0"
/evidence=predicted
/translation="DELIGENPQPEDiLGESGLLKRLSKRLVERALAGEELTHHLQOSS
NDQS-GDeNSNGPRNSRNGYSKKTVQSEQG-EMDLSIPDRDCG-EFEPVLVPKGQRRI
A-GLDEKIIIALYARGMTTRDIRAQLVELYG--ANISEALISDVNTSVMEEVKDWRSP
LDEV--YPIVYLDALYVNIVKVNQVSKRAVYVALVTVEGNKELLGLWIGAAerEGAK
FWLSVLTDLKNRGTQDILIAACDGLKGFPQAIIESVYPQTOVQVCIVHLIRNSLRHVPW
KESRAVAADLKPIYQAATLE-ESEAALDAFAH-KWDETYPGISQIWIWHDNVAPLFO
YPMAIRKVITYTTNAIESLNRSLRKVIKTAVFPNEESVYKLMFLAMRNISKW-WTRPI
LNWKAALSHFAILFPTRFNYXIH"
/note="IS256 e-value= 1.4e-166 complete sequence hit
coverage= 100%, between model( 410 aa) positions 1; 410
length is 404aa with 11 gaps, 1 stops, absolute frame=
Minus2"
complement(62245..61035)
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/colour="255 0 0"
/evidence=predicted
/translation="DELIGENPQPEDI LGESGLLKRLSKRLVERALAGELTHHLQOSS
NDQS-GDeNSNGPRNSRN GYSKKTVQSEQG-EMDLSIPRDRCG-EFEPVLVPKGQRRI
A-GLDEKIIALYARGMTTRDIRAQLVELYG--ANISEALISDVNTSVMEEVKDWRSPR
LDEV--YPIVYLDALYVNIVKVNQVSKRAVYVALAVTVEGNKELLGLWIGAAerEGAK
FWLSVLTDLKRNRG TQDILIA CDGLKGFPQAIESVYPQTQVQVCIVHLIRNSLRHVPW
KESRAVAADLKEIYQAATLE-ESEAALDAFAH-KWDETYPGISOIWIRHWNVAPLFO
YPM AIRKVIYTTNAIESLNRSLRKV IKTAVFPNEESVYKLMFLAMRNISK R-WTRPI
LNWKAALSHFAILFPTRFNYXIH"
/note="IS256 e-value= 3.7e-167 complete sequence hit
coverage= 100%, between model( 410 aa) positions 1; 410
length is 404aa with 11 gaps, 1 stops, absolute frame=
Minus2"
CDS
complement(6379401..6378635)
/colour="255 0 0"
/evidence=predicted
/translation="PCLGRFILYFTKLQLPPQKKYCDLEXWIISA---IILGYNGGEF
RXLIQPIIwLV LMPVAFRI ALLSDIKNLV-----FPSILSXRLFEKXV---KL
SRYXsvNTQTL DRTXRAMPTAYDSDLTTLQWELLEPLI PAAKP-GGRPRT-TDML S VL
NAIFYL VVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWSQINEHLMQVRVSE-----
-----DRHPSPSAAICDAQSVkvgnpRCHLIGFDGGKM
VKGRKRHV LVDTLGLVLMVMVTAANIS"
/note="IS5_IS427 e-value= 4.4e-06 complete sequence hit
coverage= 100%, between model( 296 aa) positions 1; 296
length is 256aa with 47 gaps, 6 stops, absolute frame=
Minus3"
CDS
complement(6379161..6378293)
/colour="255 0 0"
/evidence=predicted
/translation="EKXVKLSRYXS VNTQTL DRTXramptaYDSDLTTLQWELLEPLI
PAAKPG----GRPR TTDM L-----SVLNAIFYL VVTGCQWRQ
--LPHDFPCWSTVSYFRRWRDDGTWSQINEHLMQVRVSE---RHPS P SAAICDAQ
SVK-----VGNpRCHLIGFD-----GGKM-
-----VKGRKRHV LVDTLGLVLMVMVTAANISD QRGAK-----ILFWKAQRQGASLSRL
VR----IWADAGYQGQALMKWVMDRFQYVLEVVKRS DNL AGFQVIPKRWIVERTFGWL
LWSRRLNKDYEV LTRTAEALVYVAMIRLMV RRLAQEHX"
/note="IS5_IS5 e-value= 1.8e-09 complete sequence hit
coverage= 100%, between model( 422 aa) positions 1; 422
length is 290aa with 140 gaps, 4 stops, absolute frame=
Minus3"
CDS
complement(6379122..6378272)
/colour="255 0 0"
/evidence=predicted
/translation="TQTL DRTXRAM-----PTAYDSDLTTLQWELLEPLI PAAK-----
PGGRPRTTDM LS VLNAIFYL VVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWSQ
INEHLMQVRVSE DRHPSPSAAICDAQSVKVG NPRCH-LIGFDGGKMVKGRKRHV LV
TLGLV LMVMVTAANISD QR-GAKI LF WKAQRQGAs1S RL VRIWADAGYQGQALMKWV M
DRFQYVLEVVKRS DNL AFGQVIPKRWIVERTFGWL LWSRRLNKDYEV LTRTAEALVY V
AMIRLMV RRLAQEHXNFSNSLL"
/note="IS5_IS1031 e-value= 3.6e-111 complete sequence hit
coverage= 100%, between model( 295 aa) positions 1; 295
length is 284aa with 14 gaps, 2 stops, absolute frame=
Minus3"
CDS
complement(6379080..6378272)
/colour="255 0 0"
/evidence=predicted
/translation="YDSDLTTLQWELLEPLI PAAK-----PGGRPRTTDM LS VLNA
IFYL VVTGCQWRQLPHDFPCWSTVSYFRRWRDDGTWSQINEHLMQVRVSE DRHPSP

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SAAICDAQSVKGNPRCH-LIGFDGGKMKGRKRHVLVDTLGLVLMVMVTAANISDQR
-GAKILFWKAQRQGaslSRLVRIWADAGYQGQALMKWVMDRFQYVLEVVKRSNDNLAGF
QVIPKRWIVERTFGWLLWSRRLNLDYEVLTRTAEALVYVAMIRLMVRRLAQEHXNFSN
SLL"
/note="IS5_IS1031 e-value= 2.4e-113 fragment hit
coverage= 93.56%, between model( 295 aa) positions 20;
295 length is 270aa with 9 gaps, 1 stops, absolute frame=
Minus3"
CDS complement(6379071..6378833)
/colour="255 0 0"
/evidence=predicted
/translation="DLTTLQWELLEPLIPAAKP-GGRPRT-TDMLSVLNAIFYLVVTG
CQWRQLPHDFPCWSTVSYFRRWRDDGTWSQINEHLRM"
/note="IS5_IS427 e-value= 2e-19 fragment hit coverage=
27.70%, between model( 296 aa) positions 125; 206 length
is 80aa with 2 gaps, 0 stops, absolute frame= Minus3"
CDS complement(6361275..6360608)
/colour="255 0 0"
/evidence=predicted
/translation="QRFIQGLSPETIHLLSRIHRHSHHQVRQRAHCILLSFEGFNVT
ELMSIFAVTRKTVTWLDAWDNHC---LVGLYDQPGGRGRKPKLRDVQ-KEQIREWAKM
TP-----HNLNVVLAKEAUNIEVSCKTLKRILKSCSMSWRRRLRRVAGQPDP
VEYATK-----RHOLEVLKRQEEKGELdlyYLDESGFCCLVPYVPY-AWQEKG-ETLGL
PSQRSGRFNVLGLMNHRNDLTSYVF"
/note="IS630 e-value= 4.6e-12 fragment hit coverage=
63.83%, between model( 376 aa) positions 1; 240 length is
223aa with 20 gaps, 0 stops, absolute frame= Minus3"
CDS complement(6361275..6360251)
/colour="255 0 0"
/evidence=predicted
/translation="QRFIQGLSPETIHLLSRIHRHSHHQVRQRAHCILLSFEGFNVT
ELMSIFAVTRKTVTWLDAWDNHC---LVGLYDQPGGRGRKPKLRDVQ-KEQIREWAKM
TP-----HNLNVVLAKEAUNIEVSCKTLKRILKSCSMSWRRRLRRVAGQPDP
VEYATK-----RHOLEVLKRQEEKGELdlyYLDESGFCCLVPYVPY-AWQEKG-----
-----ETLGLPSQRSGRFNVLGLMNHRNDLTSYFDKSITSAVVACIDDFSQTC
DQHT----VVVMDQASIHKNTEIEENIEDWKAkNVEIFWLPTYSPHLNIEIFWRFMK
YEWLEFDAYKCLGSLSLYIDKILKGFR--DYVIDFGXVLSVLLFGY"
/note="IS630 e-value= 3.7e-16 complete sequence hit
coverage= 100%, between model( 376 aa) positions 1; 376
length is 342aa with 39 gaps, 1 stops, absolute frame=
Minus3"
CDS complement(6360546..6360377)
/colour="255 0 0"
/evidence=predicted
/translation="DQHTVVVMDQASIHKNTEIEENIEDWKAkNVEIFWLPTYSPHLN
LIEIFWRFMKYEW"
/note="IS630 e-value= 1.9e-12 fragment hit coverage=
14.89%, between model( 376 aa) positions 277; 332 length
is 57aa with 0 gaps, 0 stops, absolute frame= Minus3"
CDS complement(6350184..6349745)
/colour="255 0 0"
/evidence=predicted
/translation="-RNVTXEAKSYDMGLHHIVFIPKRRRVYIGSLRIRLGVLFRDL
AEQRDVEILEGHLLPDHVHMCMSIPPKHAVSGVGFMKGKSAIAIARQFMGKRRNYSG
ESFWAXGYYVSTVDLYEGMVRAYIRNQELEDARLEQLSLPLGX---CXR"
/note="IS605 e-value= 1e-36 complete sequence hit
coverage= 100%, between model( 152 aa) positions 1; 152
length is 147aa with 5 gaps, 4 stops, absolute frame=
Minus3"
CDS complement(6350172..6349730)

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/colour="255 0 0"
/evidence=predicted
/translation="XEAKSYDMGLH----HIVFIPKRRRVIYGSLRIRLGVLFR-DL
AEQRDVEILEGHLLPDHVHMCMSIPPKHAVSGVVGFMKGKSAIAIARQFMGKRRNYSG
ESFWAXGYYVSTVD-LYEGMVRAYIRNQELEDARLEQLSLPLGXCXRVAPWG"
/note="IS200 e-value= 2.5e-35 complete sequence hit
coverage= 100%, between model( 154 aa) positions 1; 154
length is 148aa with 6 gaps, 4 stops, absolute frame=
Minus3"
CDS complement(6350172..6349733)
/colour="255 0 0"
/evidence=predicted
/translation="XEAKSYDMGLH----HIVFIPKRRRVIYGS-LRIRLGVLFRDL
AEQRDVEILEGHLLPDHVHMCMSIPPKHAVSGVVGFMKGKSAIAIARQFMGKRRNYSG
ESFWAXGYYVSTVD-LYEGMVRAYIRNQELEDARLEQLSLPLGXCXRVAPW"
/note="IS200_IS605 e-value= 8.1e-37 complete sequence hit
coverage= 100%, between model( 153 aa) positions 1; 153
length is 147aa with 6 gaps, 4 stops, absolute frame=
Minus3"
CDS complement(6350139..6349763)
/colour="255 0 0"
/evidence=predicted
/translation="HIVFIPKRRRVIYGSLRIRLGVLFR-DLAEQRDVEILEGHLLP
DHVHMCMSIPPKHAVSGVVGFMKGKSAIAIARQFMGKRRNYSGESFWAXGYYVSTVD-
LYEGMVRAYIRNQELEDARLEQLSLP"
/note="IS200 e-value= 1.2e-40 fragment hit coverage=
83.12%, between model( 154 aa) positions 16; 143 length
is 126aa with 2 gaps, 1 stops, absolute frame= Minus3"
CDS complement(6350139..6349760)
/colour="255 0 0"
/evidence=predicted
/translation="HIVFIPKRRRVIYGS-LRIRLGVLFRDLAEQRDVEILEGHLLP
DHVHMCMSIPPKHAVSGVVGFMKGKSAIAIARQFMGKRRNYSGESFWAXGYYVSTVD-
LYEGMVRAYIRNQELEDARLEQLSLPL"
/note="IS200_IS605 e-value= 7.4e-40 fragment hit
coverage= 84.31%, between model( 153 aa) positions 16;
144 length is 127aa with 2 gaps, 1 stops, absolute frame=
Minus3"
CDS complement(6350139..6349760)
/colour="255 0 0"
/evidence=predicted
/translation="HIVFIPKRRRVIYGSLRIRLGVLFRDLAEQRDVEILEGHLLPD
HVHMCMSIPPKHAVSGVVGFMKGKSAIAIARQFMGKRRNYSGESFWAXGYYVSTVDLY
EGMVRAYIRNQELEDARLEQLSLPL"
/note="IS605 e-value= 2.1e-41 fragment hit coverage=
83.55%, between model( 152 aa) positions 17; 143 length
is 127aa with 0 gaps, 1 stops, absolute frame= Minus3"
CDS complement(6347595..6346655)
/colour="255 0 0"
/evidence=predicted
/translation="TKNRXPMSYQIRNWSEYNAGLKQRGSVTFWLEQS--AIVHWLET
TPRQKRGASLTYSDTAISTFETVKCIYGLAGRQTEGFLNSLFELMGIELPVCVDHSTVS
RRKGQLSISLPVIPKQGAIHVVIDSTGVKVYG-----EGEWKTRQHGVS-K
RRTWRKLHLSVDESTGEILTVTTNDVQDGEVFEDLEGIDD-----EIEQVSAD-G
AYDQSHCYDALMERNATAIIPPRKNA-----KIWQHGNC--NApphpRDQ
NLRAIRKQGRKRWKQAHYHRRSLAETTMFRFKTIFGGQVRSRNFDNQATELLLQCAA
LN-RMIQIAKPETVWVE"
/note="IS5_IS903 e-value= 1.1e-96 complete sequence hit
coverage= 100%, between model( 347 aa) positions 1; 347
length is 314aa with 37 gaps, 1 stops, absolute frame=

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Minus3"
CDS complement(6347595..6346655)
/colour="255 0 0"
/evidence=predicted
/translation="TKNRXPMSYQIRNWSEYNAGLKQRGSVTFWLEQS--AIVHWLET
TPRQKRGASLTYSDETAISTFETVKCIYGLAGRQTEGFLNSLFELMGIELPVCVDHSTVS
RRKGQLSISLPVIPKQGAIHVVIDSTGVKVYG-----EGEWKTRQHGVS-K
RRTWRKLHLSVDESTGEILTGVVTNDVQDGEVFEDLLEGIDD----EIEQVSAD-G
AYDQSHCYDALMERNATAAIPPRKNA-----KIWQHGNC--NApphpRDO
NLRAIRKQGRKRWKQAHYHRRSLAETTMFRFKTIFGGQVRSRNFDNQATELLLQCAA
LN-RMIQIAKPETVWVE"
/note="IS5_IS903 e-value= 2.2e-96 complete sequence hit
coverage= 100%, between model( 347 aa) positions 1; 347
length is 314aa with 37 gaps, 1 stops, absolute frame=
Minus3"
CDS complement(6338160..6337466)
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS
hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK
PQIAAGMIQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP
AEQAVFAEPWQSFERTFSNGTTETTRYrQEIIYGqrhhOKRY"
/note="IS4 e-value= 4.7e-14 fragment hit coverage=
51.23%, between model( 486 aa) positions 1; 249 length is
232aa with 27 gaps, 0 stops, absolute frame= Minus3"
CDS complement(6338160..6337034)
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS
hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK
PQIAAGMIQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP
AEQAVFAEPWQSFERTFSNGT-----TETTRYR
QEIIYGQRHHQKRYWLTTDPQTL PENSTS-----YVMAAA
APE---IKLDEIGDCYGFRTWIEYGLQSKD-TLGWADFRMTHYEQIEKWWEIVMSA
FLMVSFLADVFNDS-----CPVAHQHFAQHPwWDNQNG
WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"
/note="IS4 e-value= 9.9e-07 complete sequence hit
coverage= 100%, between model( 486 aa) positions 1; 486
length is 376aa with 117 gaps, 0 stops, absolute frame=
Minus3"
CDS complement(6335550..6334313)
/colour="255 0 0"
/evidence=predicted
/translation="IRIPLNLPDI--RVLELSKTERGDWL----IKIESTLQGTTC
HQCGREITDL-HCHDQ-PFRIRHLPFEPVYLEIRPKRYRCKYCDCDhpTTTOHLEWH
EPRSPNTKAYERWLLRILIN-STVSDVARKLGVS E DIVSGI IDRWIAAQVDWSEYADL
KVMGMDEISLKRG--HR---DFVVLITIPTTdgVDILAVLADRKKQQT VANFLQSIP-I
DLRQTIERVCTDMYQGFVSAVREQLPQAKIVIDRFHVTKAYRNCADTVRKREVKRLRR
ELS-----KQEYD-----SIKGAMWPFRKRPNLKES-EQOLLER
LFA--YSPQLQOAYNLREKLTQIFEGRYTKHGAKcAIRAWCKQV1KSGIKEFDSLTT
INNWMDEMTNYFLEG-WTSGFVEGFNNRVKVLKRCYGYIFDIERLFQRISLDLNGYQT
FAVTXTL"
/note="ISL3 e-value= 1.2e-45 complete sequence hit
coverage= 100%, between model( 451 aa) positions 1; 451
length is 413aa with 44 gaps, 1 stops, absolute frame=
Minus3"
CDS complement(6335391..6334313)
/colour="255 0 0"

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/evidence=predicted
/translation="RIRHLPLFEVPVYLEIRPKRYRCKYCDDhpTTTQHLEWHEPRSP
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DEISLKRG--HR---DFVVLITIPTTdgVDILAVLADRQQTANFLQSIP-IDLRQT
IERVCTDMYQGFVSAVREQLPQAKIVIDRFHVTKAYRNCADTVRKREVKRLRRELSS-
-----KQEYD-----SIKGAMWPFRKRPENLKES-EQOLLERLFA--
YSPQLKQAYNLREKLTOIFEGRYTKHGAKcAIRAWCKQV1KSGIKEFDSFLTTINNWM
DEMNTNYFLEG-WTSGFVEGFNNRVKVLKRRCYGIFDIERLFQRISLDLNGYQTFAVTX
TL"
/note="ISL3 e-value= 8.8e-52 fragment hit coverage=
86.03%, between model( 451 aa) positions 64; 451 length
is 360aa with 34 gaps, 1 stops, absolute frame= Minus3"
complement(6315477..6314273)
/colour="255 0 0"
/evidence=predicted
/translation="TCSFLTSXVSIAESGLLKRLSKRLVERALAGELTHHLOQSSND
QS-GDeNSNGPRNSRNGYSKKTVQSEQG-EMDLSIPRDRCG-EFEPVLVPKGQRRIA-
GLDEKIIALYARGMTTRDIRAQLVELYG--ANISEALISDVINSVMEVKDWRSRPLD
EV--YPIVYLDALYVNIKVNGQVSKRAVYVALAVTVEGNKELLGLWIGAAerEGAKFW
LSVLTDLKNRGTQDILIAACCDGLKGFPQAIESVYPQTQVQVCIVHLIRNSLRHVPWE
SRAVAADLKPIYQAATLE-ESEAALDAFAH-KWDETPGISQIWIRHWDNVAPLFQYP
MAIRKVIYTTNAIESLNRSLRKVIKTAVFPNEESVYKLMFLAMRNISKW-TTRPILN
WKAALSHFAILFPTRFNYXIH"
/note="IS256 e-value= 6.6e-165 complete sequence hit
coverage= 100%, between model( 410 aa) positions 1; 410
length is 402aa with 11 gaps, 2 stops, absolute frame=
Minus3"
complement(6315435..6314273)
/colour="255 0 0"
/evidence=predicted
/translation="SGLLKRLSKRLVERALAGELTHHLOQSSNDQS-GDeNSNGPRNS
RNGYSKKTVQSEQG-EMDLSIPRDRCG-EFEPVLVPKGQRRIA-GLDEKIIALYARGM
TTRDIRAQLVELYG--ANISEALISDVINSVMEVKDWRSRPLDEV--YPIVYLDALY
VNIKVNGQVSKRAVYVALAVTVEGNKELLGLWIGAAerEGAKFWLSVLTDLKNRGTQD
ILIACCDGLKGFPQAIESVYPQTQVQVCIVHLIRNSLRHVPWESRAVAADLKPIYQA
ATLE-ESEAALDAFAH-KWDETPGISQIWIRHWDNVAPLFQYPMAIRKVIYTTNAIE
SLNRSLRKVIKTAVFPNEESVYKLMFLAMRNISKW-TTRPILNWKAALSHFAILFPT
RFNYXIH"
/note="IS256 e-value= 1.1e-164 fragment hit coverage=
96.59%, between model( 410 aa) positions 15; 410 length
is 388aa with 11 gaps, 1 stops, absolute frame= Minus3"
complement(6239001..6238595)
/colour="255 0 0"
/evidence=predicted
/translation="MLLVRPISTESLRLHRIYHSSRHQVRQRAHCLILFAQGWPPY
TLASLFSVSPKTVYNWLKAWNNRG---FAGLYNHPGRGRKPMFNPDQQQIYEWT-QA
SPIQ-----LNQVLAQIEQQWSVRVSKATVKRVLKQMDMSWHR"
/note="IS630 e-value= 8.7e-15 fragment hit coverage=
39.63%, between model( 376 aa) positions 1; 149 length is
136aa with 13 gaps, 0 stops, absolute frame= Minus3"
complement(6238941..6238604)
/colour="255 0 0"
/evidence=predicted
/translation="SSRHQVRQRAHCLILFAQGWPPYTLASLFSVSPKTVYNWLKAW
NNRGFAGLYNH---PGRGRKPMFNPDQQQIYEWTQASPIQLNQVLAQIEQQWSVR--
-VSKATVKRVLKQMDMS"
/note="IS481 e-value= 3.5e-09 fragment hit coverage=
33.62%, between model( 351 aa) positions 1; 118 length is
113aa with 6 gaps, 0 stops, absolute frame= Minus3"
complement(6207357..6205703)

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/colour="255 0 0"
/evidence=predicted
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ACCPVCHQTSHRVHSRYERTLRDLPCVEFCLTILLQVCKFFCsnKTCRKRIfterlpQ
VAVPWARRTVRFRAEHLSSIGLALGAAAARLSYQINYGSSRNT---MLRALFKLPLP
-SVTTPKILGVDDFALRRG--HEYGTILVDLEKH---QPIVLLTDRKADTLADWLNE
HP-----GVEVISRDRSKAYKSGASEGAPDALQVADRFHLLQNLEEILENVF-----
-----SSHSQ---VIKTVEYTLKATLAEHQDTEAMSQPvvkp
qvdpsnrkaqnarrlekyeqthalrkqgylikdiahhlgiqkrtvytylaadtfqey
kthprrgwsglnpykaylleqwnkgrqnskqliaeiqqqgfkgsytmvvrythklrqs
lppqpprdslnelpggrppeaqeliqkpltvqraawlvmrkven1TEEDETILE-QL
SSQPELSKAIDLQSLFIVR-KRLPQHLDPWLDRAKN--SALKPFQSFAKGLLDDYE
AVKA-ALTLEVSNGQVEGQNNRLK-----MVKRQMYGRAGLDLLNKRLV
L"
/note="ISL3 e-value= 9.2e-10 complete sequence hit
coverage= 100%, between model( 451 aa) positions 1; 451
length is 552aa with 73 gaps, 0 stops, absolute frame=
Minus3"
CDS complement(6206910..6206654)
/colour="255 0 0"
/evidence=predicted
/translation="TTPKILGVDDFALRRG--HEYGTILVDLEKH---QPIVLLTDR
KADTLADWLNEHP-----GVEVISRDRSKAYKSGASEGAPDALQVADRFHILLO"
/note="ISL3 e-value= 1.5e-21 fragment hit coverage=
21.73%, between model( 451 aa) positions 156; 253 length
is 86aa with 12 gaps, 0 stops, absolute frame= Minus3"
CDS complement(6206475..6206177)
/colour="255 0 0"
/evidence=predicted
/translation="RLEYEQTHALRKQGYLIKDIAHHLGIGKRTVYTYLAADTFQEY
KTHPRR-----GWGLNPYKAYLLEQWNKGRQNSKQ-----LLAEIQQQGFKG
SYTMVVRYTHKL"
/note="IS21_ORF1 e-value= 2.7e-14 fragment hit coverage=
21.90%, between model( 525 aa) positions 1; 115 length is
100aa with 15 gaps, 0 stops, absolute frame= Minus3"
CDS complement(6206010..6205742)
/colour="255 0 0"
/evidence=predicted
/translation="LEQLSSQPELSKAIDLQSLFIVR-KRLPQHLDPWLDRAKN--SALKPFQSFAKGLLDDYEAVKA-ALTLEVSNGQVEGQNNRLKMRVKRQMYG"
/note="ISL3 e-value= 1.6e-06 fragment hit coverage=
20.84%, between model( 451 aa) positions 331; 424 length
is 90aa with 4 gaps, 0 stops, absolute frame= Minus3"
CDS complement(6205539..6203885)
/colour="255 0 0"
/evidence=predicted
/translation="FQQFLPCQDTLHLDSDWLDSTNHQMT-----FHVSSSTQAL
ACCPVCHQTSHRVHSRYERTLRDLPCVEFCLTILLQVCKFFCsnKTCRKRIfterlpQ
VAVPWARRTVRFRAEHLSSIGLALGAAAARLSYQINYGSSRNT---MLRALFKLPLP
-SVTTPKILGVDDFALRRG--HEYGTILVDLEKH---QPIVLLTDRKADTLADWLNE
HP-----GVEVISRDRSKAYKSGASEGAPDALQVADRFHLLQNLEEILENVF-----
-----SSHSQ---VIKTVEYTLKATLAEHQDTEAMSQPvvkp
qvdpsnrkaqnarrlekyeqthalrkqgylikdiahhlgiqkrtvytylaadtfqey
kthprrgwsglnpykaylleqwnkgrqnskqliaeiqqqgfkgsytmvvrythklrqs
lppqpprdslnelpggrppeaqeliqkpltvqraawlvmrkven1TEEDETILE-QL
SSQPELSKAIDLQSLFIVR-KRLPQHLDPWLDRAKN--SALKPFQSFAKGLLDDYE
AVKA-ALTLEVSNGQVEGQNNRLK-----MVKRQMYGRAGLDLLNKRLV
L"
/note="ISL3 e-value= 9.2e-10 complete sequence hit
coverage= 100%, between model( 451 aa) positions 1; 451

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length is 552aa with 73 gaps, 0 stops, absolute frame= Minus3"  
CDS complement(6205092..6204836)  
/colour="255 0 0"  
/evidence=predicted  
/translation="TTPKILGVDDFALRRG--HEYGTILVDLEKH---QPIVLLTDR  
KADTLADWLNEHP-----GVEVISRDRSKAYKSGASEGAPDALQVADRFHLLQ"  
/note="ISL3 e-value= 1.5e-21 fragment hit coverage= 21.73%, between model( 451 aa) positions 156; 253 length is 86aa with 12 gaps, 0 stops, absolute frame= Minus3"  
CDS complement(6204657..6204359)  
/colour="255 0 0"  
/evidence=predicted  
/translation="RLEKYEQTHALRKQGYLIKDIAHHLGIGKRTVYTYLAADTFQEY  
KTHPRR-----GWSGLNPYKAYLLEQWNKGRQNSKQ-----LLAEIQQQGFKG  
SYTMVVRVTHKLR"  
/note="IS21\_ORF1 e-value= 2.7e-14 fragment hit coverage= 21.90%, between model( 525 aa) positions 1; 115 length is 100aa with 15 gaps, 0 stops, absolute frame= Minus3"  
CDS complement(6204192..6203924)  
/colour="255 0 0"  
/evidence=predicted  
/translation="LEQLSSOPELSKAIDLQAQSLLFIVR-KRLPQHLDPWLDRAKN--  
SALKPFQSFAKGLLDDYEAVKA-ALTLEVSNQVGEQNNRLKMKVRQMYG"  
/note="ISL3 e-value= 1.6e-06 fragment hit coverage= 20.84%, between model( 451 aa) positions 331; 424 length is 90aa with 4 gaps, 0 stops, absolute frame= Minus3"  
CDS complement(6061491..6061148)  
/colour="255 0 0"  
/evidence=predicted  
/translation="KYIVTLTPEERSELIQQLTRRTLSARKMKRAQILMLADEGHKDD  
TITQMLNAGISTVHRTRQKFVEGG---VEfALNERPRPGGQKKLDSKAEALLIATACS  
DPPTG----CCRWTMQLLAE"  
/note="IS630 e-value= 1.2e-15 fragment hit coverage= 32.18%, between model( 376 aa) positions 1; 121 length is 115aa with 7 gaps, 0 stops, absolute frame= Minus3"  
CDS complement(5745174..5744480)  
/colour="255 0 0"  
/evidence=predicted  
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS  
hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR  
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErlKEEDEYLSK  
PQIAAGMIQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
AEQAVFAEPWQSFERTFSNGTTETRYrQEIIYGqrhhQKRY"  
/note="IS4 e-value= 4.7e-14 fragment hit coverage= 51.23%, between model( 486 aa) positions 1; 249 length is 232aa with 27 gaps, 0 stops, absolute frame= Minus3"  
CDS complement(5745174..5744048)  
/colour="255 0 0"  
/evidence=predicted  
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS  
hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR  
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErlKEEDEYLSK  
PQIAAGMIQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
AEQAVFAEPWQSFERTFSNGT-----TETRYR  
QEIIYGQRHHQKRYWLLTDPQTL PENSTS-----YVMAA  
APE----IKLDEIGDCYGFRTWIEYGLQSKD-TLGWADFRMTHYEQIEKWWEIVMSA  
FLMVSLFADVFNDS-----CPVAHQHFAQHPwWDNQNG  
WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"  
/note="IS4 e-value= 9.9e-07 complete sequence hit

coverage= 100%, between model( 486 aa) positions 1; 486 length is 376aa with 117 gaps, 0 stops, absolute frame= Minus3"

CDS complement(5719893..5719670)  
/colour="255 0 0"  
/evidence=predicted  
/translation="SQMSTLTCNCRSQN-VVKNGRIHNGKQNHKCKTCGRQFV--EA  
PQQKRIDSSTKGLIDKLLKEIPLAGIARVCDVS"  
/note="IS1\_ORF1 e-value= 3.6e-14 fragment hit coverage= 32.64%, between model( 239 aa) positions 1; 78 length is 75aa with 3 gaps, 0 stops, absolute frame= Minus3"

CDS complement(5522628..5522375)  
/colour="255 0 0"  
/evidence=predicted  
/translation="HIEFSyplMQCPLCGHPK-IYKHGKTSKGSQRXRCPHCHQTFS-  
DtfDTLYYRRQisPQTIQVILQSHAEGLSSFRGLPRITGVAYNT"  
/note="IS1\_ORF1 e-value= 9e-13 fragment hit coverage= 33.89%, between model( 239 aa) positions 1; 81 length is 85aa with 2 gaps, 1 stops, absolute frame= Minus3"

CDS complement(5391534..5391422)  
/colour="255 0 0"  
/evidence=predicted  
/translation="KDYERXTDSTEVMIYICMIRLMVRRVAXTLRRWSLFTH"  
/note="IS5\_IS1031 e-value= 2.7e-08 fragment hit coverage= 12.88%, between model( 295 aa) positions 258; 295 length is 38aa with 0 gaps, 2 stops, absolute frame= Minus3"

CDS complement(5338785..5338049)  
/colour="255 0 0"  
/evidence=predicted  
/translation="-----TGJVYKRTFkpMLHAWHTYHLSRSN--AGRPPKLCRCDQL  
LVALQYWREYRTYFHIAGDWEVSESTVCRIVHQVETALMNSGLFRLPGQKSLLQGFER  
PDVVVMDVTETPIERPQTRQKAYYSGKKRDIPSNARLSLTATLXr1saltLVQVVG--  
-----MIFRSSRVQVSISIQIPRVCKIADIKGLO-----PIMP-TAMFLSRSHNTV  
NXLPCSESITVLXVRNEWALNTLIAAXRFSEFCRSAIAIVVVATRCGVTX"  
/note="IS5\_ISL2 e-value= 3.1e-21 complete sequence hit coverage= 100%, between model( 260 aa) positions 1; 260 length is 246aa with 22 gaps, 5 stops, absolute frame= Minus3"

CDS complement(5338725..5338415)  
/colour="255 0 0"  
/evidence=predicted  
/translation="SRSNAGRPPKLCRCDQLLVALQYWREYRTYFHIAGDWEVSESTV  
CRIVHQVETALMNSGLFRLPGQKSLLQGFERPDVVVMDVTETPIERPQTRQKAYYSGK  
KR"  
/note="IS5\_ISL2 e-value= 9.3e-44 fragment hit coverage= 40%, between model( 260 aa) positions 26; 129 length is 104aa with 0 gaps, 0 stops, absolute frame= Minus3"

CDS complement(5175534..5174819)  
/colour="255 0 0"  
/evidence=predicted  
/translation="YLSPEs-LQCRASSKVVS MXSTVGNPS-----ILARISDL  
FPHCWRLGSLXINRLPYCp pGRDRSDELR LSLTRSEISATR-----VRATGCR  
CDGCDXNAHXTSPDKTKSVLF---RKKKRHTFKCQIIANRNTLEIICLN VGPGRHD  
FQIFKGSGIHIHPDTESLQDSGYQGIAAYHANSYVPLKPKQHGE LTSLQREYNRALSQ  
ERMGIEHINRSLKIFRILSER YRNRRRYALRCNLIAAIYNYEL"  
/note="IS5\_ISL2 e-value= 1.5e-39 complete sequence hit coverage= 100%, between model( 260 aa) positions 1; 260 length is 239aa with 23 gaps, 4 stops, absolute frame= Minus3"

CDS complement(5175219..5174819)

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/colour="255 0 0"
/evidence=predicted
/translation="KKKRHTFKCQIIANRNTLEIICLNVPGPGRHDFQIFKGSGIHIH
PDTESLQDSGYQGIAAYHANSYVPLKKPQHGE LTSLQREYNRALSQERMGIEHINRSL
KIFRILSERYNRRRRYALRCNLIAAIYNYEL"
/note="IS5_ISL2 e-value= 6.5e-62 fragment hit coverage=
51.54%, between model( 260 aa) positions 127; 260 length
is 134aa with 0 gaps, 0 stops, absolute frame= Minus3"
complement(5122416..5122250)
/colour="255 0 0"
/evidence=predicted
/translation="SR RRAYPNDMSDTEWDVLRPLLPPANGFR-----RPRTVNLR
EILNAIFYVQRSGYQWEML"
/note="IS5_IS1031 e-value= 1.2e-20 fragment hit coverage=
21.36%, between model( 295 aa) positions 15; 77 length is
56aa with 7 gaps, 0 stops, absolute frame= Minus3"
complement(4461825..4461482)
/colour="255 0 0"
/evidence=predicted
/translation="KYIVTTLTPEERSEL IQLTRRRTLSARKMKRAQILMLADEGHKDD
TITQMLNAGISTVHRTRQKFVEGG---VEfALNERPRPGGQKKLDSKAEALLIATACS
DPPTG----CCRWTMQLLAE"
/note="IS630 e-value= 1.2e-15 fragment hit coverage=
32.18%, between model( 376 aa) positions 1; 121 length is
115aa with 7 gaps, 0 stops, absolute frame= Minus3"
complement(4252959..4252802)
/colour="255 0 0"
/evidence=predicted
/translation="HHPHPRVQRRMEVLYLKSQGLPHAQICOLCQISRPTLAKTLRLY
QQGGIEGLK"
/note="IS481 e-value= 1.1e-08 fragment hit coverage=
15.10%, between model( 351 aa) positions 1; 53 length is
53aa with 0 gaps, 0 stops, absolute frame= Minus3"
complement(4219197..4219103)
/colour="255 0 0"
/evidence=predicted
/translation="AERG--ITLFELPSYSPHLNLIERLWQFMKYQWI"
/note="IS630 e-value= 1.8e-09 fragment hit coverage=
9.04%, between model( 376 aa) positions 300; 333 length
is 32aa with 2 gaps, 0 stops, absolute frame= Minus3"
complement(4134504..4134368)
/colour="255 0 0"
/evidence=predicted
/translation="WQTDGXDGYSRQLPDE---VIHHVSKALTQRLERTNGILWQQTG
RWHRR"
/note="IS1_ORF2 e-value= 3.9e-08 fragment hit coverage=
20.68%, between model( 237 aa) positions 164; 212 length
is 46aa with 3 gaps, 1 stops, absolute frame= Minus3"
complement(3873963..3873578)
/colour="255 0 0"
/evidence=predicted
/translation="YADESGMDHRDEYDY-AYGPKGE-----RVYA-LKTG-
RRSGRVNMIAALRAKQL--MAPFTIEGACNRTVFELwLERCLIPv1KPGQKLVI--DN
ATFHKGQIQELVEKAG--CEVWYLPPYSPDLNKIERSWSWIKSIR"
/note="IS630 e-value= 1.1e-13 fragment hit coverage=
38.83%, between model( 376 aa) positions 188; 333 length
is 129aa with 20 gaps, 0 stops, absolute frame= Minus3"
complement(3585738..3585497)
/colour="255 0 0"
/evidence=predicted

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CDS complement(2404083..2402957)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="FKHLHLGMI~~s~~DIKRKSLPAIARAVGLENHQLHHFLSESPWVAS  
 hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR  
 QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK  
 PQIAAGMIRQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP  
 AEQAVFAEPWOSFERTFSNGT-----TETRYR  
 QEIIYQQRHHQKRyWLLTDPQTLPENSTS-----YVMAA  
 APE----IKLDEIGDCYGFRTWIEYGLKQSKD-TLGWADFRMTHYEQIEKWWEIVMSA  
 FLMVSLFADVFNDS-----CPVAHQHFAQHPwWDNQNG  
 WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"  
 /note="IS4 e-value= 9.9e-07 complete sequence hit  
 coverage= 100%, between model( 486 aa) positions 1; 486  
 length is 376aa with 117 gaps, 0 stops, absolute frame=  
 Minus3"  
 CDS complement(2382702..2382314)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="FFMDESGFSLVPCIPY-GWQPIG-----TYL-EIPT  
 RSSKRLNVLGFLSRRQGL--HAYTSEQTITSEVVShCIDIFFFADV--ELPTVIVVDQA  
 PIHTSQsiyEMKAWEARG--ITLFELPSYSPHLNLIERLWQFMKYQWI"  
 /note="IS630 e-value= 6.5e-11 fragment hit coverage=  
 39.10%, between model( 376 aa) positions 187; 333 length  
 is 130aa with 21 gaps, 0 stops, absolute frame= Minus3"  
 CDS complement(2279970..2279714)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="SMECPCCQSOK-IHKRGFD~~s~~lqdgtLVQRYQCEDCNRRFK-ERT  
 GNPMARLRTtslVVSYAIKARTKGMGV RATGRTFGTSHTTIMRW"  
 /note="IS1\_ORF1 e-value= 8.4e-08 fragment hit coverage=  
 33.89%, between model( 239 aa) positions 5; 85 length is  
 86aa with 2 gaps, 0 stops, absolute frame= Minus3"  
 CDS complement(1504611..1503287)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="CDSDVTLD~~F~~---YQDHPLCVQFSDDLSSDV~~G~~ILLAAQAESRI  
 HICQDIADCIEWRDPDKLTHSLPQLVAQRVYQLIGGYEDANDSDSLRHDP~~I~~FKIACE  
 YLPIPESnV~~L~~ASQLTISRLENQVTTDQTAAMRRQFIDRFIA----SYPHPPSTIVLD  
 IDGWDDPTHG~~D~~QEGSAFHGYYGQHMYFPVLINE---AQSGFPLVCQLRRGNSHPGKA  
 VAGILRWLFWRLKRAWPGVT-----IVLRADAGFSLPEILRVCERSGIHY  
 AIGFSSNAVLKRKISNV-LEQARLOYC~~R~~TQOKARL----FDDVYYAAATWDYPRRLV  
 MKA~~EY~~LPKGANPRFVLT~~D~~-MMLSPQQLYDTFYVQRG~~G~~DSEh~~P~~IKELKRG~~I~~QADRLSCH  
 RFTANQFRLLL~~A~~-----QAAYLLMITLRXAAQ-GTELATAQVERLRCALI  
 KGAARVRVS~~V~~RRLVELATFCPFEKEIRLIAQRLCDPMP"  
 /note="IS1380 e-value= 2.1e-64 complete sequence hit  
 coverage= 100%, between model( 487 aa) positions 1; 487  
 length is 442aa with 47 gaps, 1 stops, absolute frame=  
 Minus3"  
 CDS complement(1504542..1503287)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="LSSDV~~G~~ILLAAQAESRIHICQDIADCIEWRDPDKLTHSLPQLV  
 AQRVYQLIGGYEDANDSDSLRHDP~~I~~FKIACEY~~L~~PIPESnV~~L~~ASQLTISRLENQVTTDQ  
 TAAMRRQFIDRFIA----SYPHPPSTIVLDIDGWDDPTHG~~D~~QEGSAFHGYYGQHMYF  
 PVLINE---AQSGFPLVCQLRRGNSHPGKAVAGILRWLFWRLKRAWPGVT-----  
 -----IVLRADAGFSLPEILRVCERSGIHYAIGFSSNAVLKRKISNV-LEQARLQYC  
 RTQOKARL----FDDVYYAAATWDYPRRLVMKA~~EY~~LPKGANPRFVLT~~D~~-MMLSPQQL  
 YDTFYVQRG~~G~~DSEh~~P~~IKELKRG~~I~~QADRLSCHRFTANQFRLLL~~A~~-----QA  
 AYLLMITLRXAAQ-GTELATAQVERLRCALI~~K~~GAARVRVS~~V~~RRLVELATFCPFEKEI

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RLIAQRLCDPMP"
/note="IS1380 e-value= 1.5e-67 fragment hit coverage=
94.46%, between model( 487 aa) positions 28; 487 length
is 419aa with 43 gaps, 1 stops, absolute frame= Minus3"
complement(691935..690725)
/colour="255 0 0"
/evidence=predicted
/translation="DELIGENPOPEDilGESGLLKRLSKRLVERALAGELTHHLOSS
NDQS-GDeNSNGPRNSRNGYSKKTVQSEQG-EMDLSIPDRDCG-EFEPVLVPKGQRRI
A-GLDEKIIALYARGMTTRDIRAQLVELYG--ANISEALISDVINSVMEEVKDWRSP
LDEV--YPIVYLDALYVNIVKVNQVSKRAVYVALAVTVEGNKELLGLWIGAAerEGAK
FWLSVLTDLKNRGTQDILIAACCDGLKGFPQAIESVYPQTQVQVCIVHLIRNSLRHVPW
KESRAVAADLKPIYQAATLE-ESEAALDAFAH-KWDETYPGISQIWIRHWDNVAPLFQ
YPMAIRKVIYTTNAIESLNRSLRKVIKTKAVFPNEESVYKLMFLAMRNISKR-WTRPI
LNWKAALSHFAILFPTRFNYXIH"
/note="IS256 e-value= 3.8e-165 complete sequence hit
coverage= 100%, between model( 410 aa) positions 1; 410
length is 404aa with 11 gaps, 1 stops, absolute frame=
Minus3"
complement(691935..690725)
/colour="255 0 0"
/evidence=predicted
/translation="DELIGENPOPEDilGESGLLKRLSKRLVERALAGELTHHLOSS
NDQS-GDeNSNGPRNSRNGYSKKTVQSEQG-EMDLSIPDRDCG-EFEPVLVPKGQRRI
A-GLDEKIIALYARGMTTRDIRAQLVELYG--ANISEALISDVINSVMEEVKDWRSP
LDEV--YPIVYLDALYVNIVKVNQVSKRAVYVALAVTVEGNKELLGLWIGAAerEGAK
FWLSVLTDLKNRGTQDILIAACCDGLKGFPQAIESVYPQTQVQVCIVHLIRNSLRHVPW
KESRAVAADLKPIYQAATLE-ESEAALDAFAH-KWDETYPGISQIWIRHWDNVAPLFQ
YPMAIRKVIYTTNAIESLNRSLRKVIKTKAVFPNEESVYKLMFLAMRNISKR-WTRPI
LNWKAALSHFAILFPTRFNYXIH"
/note="IS256 e-value= 9.9e-166 complete sequence hit
coverage= 100%, between model( 410 aa) positions 1; 410
length is 404aa with 11 gaps, 1 stops, absolute frame=
Minus3"
complement(558171..557924)
/colour="255 0 0"
/evidence=predicted
/translation="MQCPLCGHPK-THKHGKTSKGSQRYRCPHCHQTFS--ETFDTLH
YRRQISSEtiqtIQLQSHAEGLRGLSRITGVAYNTCVSVIR"
/note="IS1_ORF1 e-value= 2.1e-12 fragment hit coverage=
34.31%, between model( 239 aa) positions 6; 87 length is
83aa with 3 gaps, 0 stops, absolute frame= Minus3"
complement(483540..483299)
/colour="255 0 0"
/evidence=predicted
/translation="VKLAELIPWESFESEYADQFSQ---TMGAPAKPFRVALGTLIICK
EKLGISDAETVEQIRENPYLQYFLGFSEYRESAPFDASML"
/note="IS5_IS5 e-value= 2.6e-06 fragment hit coverage=
19.91%, between model( 422 aa) positions 23; 106 length
is 81aa with 3 gaps, 0 stops, absolute frame= Minus3"
complement(477669..477176)
/colour="255 0 0"
/evidence=predicted
/translation="LEKTGIESKKKTYGYR--ERD--ETQR---QAFIERLQTKHP--
HQIVYVDEAGIDNRADYPY-GYCPVG-----QRFYD-LKSG-KRTERVSFIA
ALKEGQL--FSPMTFEGSCNRLFEAWLQOSLI-SQLQLgdVIVIDNASFHGQRIEE
IVAEAG--CEIWYLPSPDNLNKIERWWFVLKN"
/note="IS630 e-value= 3e-16 fragment hit coverage=
50.80%, between model( 376 aa) positions 140; 330 length
is 165aa with 28 gaps, 0 stops, absolute frame= Minus3"

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CDS complement(474207..474032)
/colour="255 0 0"
/evidence=predicted
/translation="GXHPIAQICQVLNYPRSQVYYHARGQP-----DESELKAAIAGV
AGAYP-TYGYRRITAQLQ---RQG"
/note="IS3_IS150_ORF2 e-value= 2.1e-06 fragment hit
coverage= 17.48%, between model( 389 aa) positions 103;
170 length is 59aa with 9 gaps, 1 stops, absolute frame=
Minus3"
CDS complement(474183..474032)
/colour="255 0 0"
/evidence=predicted
/translation="CQVLNYPRSQVYYHARGQPDESELKAAIAGVAGAYPTYGYRRIT
AQLQRQG"
/note="IS3_IS407_ORF2 e-value= 1.2e-07 fragment hit
coverage= 14.83%, between model( 344 aa) positions 85;
135 length is 51aa with 0 gaps, 0 stops, absolute frame=
Minus3"
CDS complement(474147..474035)
/colour="255 0 0"
/evidence=predicted
/translation="YHArgQPDESELKAAIAGVAGAYPTYGYRRITAQLQRQ"
/note="IS3_IS2_ORF2 e-value= 9.4e-07 fragment hit
coverage= 12.25%, between model( 302 aa) positions 48; 84
length is 38aa with 0 gaps, 0 stops, absolute frame=
Minus3"
CDS complement(472965..471914)
/colour="255 0 0"
/evidence=predicted
/translation="MSPLMMKTSVFE-----GLGLGTQPRRTISHEERLVLSGNlsN
XISVKFGTMDTTIMQGXigtrpLTTEDRMLRQTHKXTQARTHQYRIhxLKXRVFTGAK
-----AIQSLAELTQMVE-----NHKG--NECDDSLTLKQSVYFI-----
-DCFSRLLXSKLK----GYCVNKHKRVARLMRQIGIMAKTKVK-RKRTTNSEHSfpRY
GNRVLNLS--IDHPEQVWVADITYIRLQ-QEFVYLAVVMDVFTRAIRGWHLRSRIDQQ
LTLRALNKALERAT---PEIHHS----DQGVQYAAAAYMQLLQQHQVQISMAGEVGQA
WQNGYAERLMRTIKEEEVD--LSDYRNFTEAYEHIEQFLEDvYMHKRIHSSLGYLTPC
EYEQQWRQQ"
/note="IS3_IS150_ORF2 e-value= 4.3e-13 complete sequence
hit coverage= 100%, between model( 389 aa) positions 1;
389 length is 351aa with 50 gaps, 5 stops, absolute
frame= Minus3"
CDS complement(472827..471917)
/colour="255 0 0"
/evidence=predicted
/translation="MDTTIMQGXIGTRp1TTEDRMLRQTHKXTQARTHQYRIHXLKXR
VFTGAKAAIQSLAELTQMVENhkgneCDDSLTLKQSVYFIDCFSSRLLXSKL1gYCVNH
KRVARLMRQIGIMAKTKVK---RKRTTNSEHSF-PRYGNRvlNLSIDHPEQVWVADI
TYIRL--QEFVYLAVVMDVFTRAIRGWHLRSRIDQQLTLRALNKALER---ATPEI
HHSDQGVQYAAAAYMQLLQQHQVQISMAGEVGQAWQNGYAERLMRTIKEEEVDLSYRN
FT--EAYEHIEQFLEDvYMHKRIHSSLGYLTPCEYEQQWRQ"
/note="IS3_IS150_ORF1 e-value= 6.7e-29 complete sequence
hit coverage= 100%, between model( 306 aa) positions 1;
306 length is 304aa with 13 gaps, 5 stops, absolute
frame= Minus3"
CDS complement(472827..471890)
/colour="255 0 0"
/evidence=predicted
/translation="MDTTIMQGX-----GTRPLTTEDRMLRQTHKXT---
QARTHQYRIHXLKXRVFTGAKA--AIQSLAELTQMVE-----NHKGNEC
DDSLTLKQSVYFI----DCF-SRLLXSKL--KGYCVNKHKRVARLMRQIGIMAKTKV-K

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RKRTtnsehsfprYGNRVLNLSIDHPEQVWVADITYIRLQ--QEFVYLA VVmDVFTRA  
 IRGWHLSRHIDQQLTLRALNKALE-RATPEIHHSQDGQVQYAAAAYMQLLQQHQVQISM  
 AEVGQAWQNGYAERLMRTIKEEEVDLSDYRNFT EAYEHI EQFLEDvYMHKRIHSSLGY  
 LTPCEYEQQWRQQNNHYCMNK"  
 /note="IS3\_IS407\_ORF2 e-value= 9.2e-07 complete sequence  
 hit coverage= 100%, between model( 344 aa) positions 1;  
 344 length is 313aa with 42 gaps, 5 stops, absolute  
 frame= Minus3"  
 CDS complement(472785..471890)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="LTTEDRmLRQTH-----KXTQARTHQYRIHXLKXRVFTGAKAA  
 IQSLAELTQMVEN-HKGNECdds1t1kqsVYFIDCF SRLLXS k1KG YCVNHKRVARLM  
 RQIGIMAKTKVKRKRTTNSEHSFPRYGNRVL-NLSIDHPEQVWVADITYIRLQQE FVY  
 LAVVMDVFTRAIRGWHL SRHIDQQLT-LRALNKALERATPE-----IHHSQDGQVQY  
 AAAAYMQLLQQHQVQISM AEGQAWQNGYAERLMRTIKEEEVDL---S-DYRNFT EAY  
 EHIEQFLEDVYMHKRIHSSLGYLTPCEYEQQWRQQNNHYCMNK"  
 /note="IS3\_IS51\_ORF1 e-value= 2.6e-25 complete sequence  
 hit coverage= 100%, between model( 307 aa) positions 1;  
 307 length is 299aa with 20 gaps, 4 stops, absolute  
 frame= Minus3"  
 CDS complement(472752..471881)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="HKXTQARTH-QYRIHXLKX-----RVFTGA---KAAIQSLAEL  
 TQMvENHKGNECDDSL----TLKQS----VYFIDCF SRLLxsKLKG YCVNHKRVAR  
 LMRQIGIMAKTKVKRKRTTNSEHSFPRYGNRVL-NLSIDHPEQVWVADITYIRLQQE F  
 VYLA VVMDVFTRAIRGWHL SRHIDQQLT LRALNKALERATPE-----IHHSQDG  
 QYAAAAYMQLLQQHQVQISM AEGQAWQNGYAERLMRTIKEEEVDLS DYrnFT EAYEH  
 IEQFLEDV--YMHKRIHSSLGYLTPCEYEQQWRQQNNHYCMNKEDS"  
 /note="IS3\_IS51\_ORF2 e-value= 1.6e-14 complete sequence  
 hit coverage= 100%, between model( 317 aa) positions 1;  
 317 length is 291aa with 31 gaps, 3 stops, absolute  
 frame= Minus3"  
 CDS complement(472737..471908)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="ARTHQYRIHXLKXRVFT----GAKAAIQSLAELTQMVENHKGNE  
 CDDSLTLKQS VYFIDCF SRLLXS k1KG YCVNHKRVARLMRQIGIMAKTKVKRKRTNS  
 EHSFPRY---GNRVLNLSIDHPEQVWVADITYIRLQQE FVYLA VVMDVFTRAIRGWHL  
 SRHIDQQLT LRALNKALER---ATPE---IHHSQDGQVQYAAAAYMQLLQQHQVQISM  
 AEVGQAWQNGYAERLMRTIKEEEVDLS DYRNFT EAYEHIEQFLEDVYMHKRIHSSLGY  
 LTPCEYEQQWRQQNN"  
 /note="IS3\_IS3\_ORF2 e-value= 7.9e-44 complete sequence  
 hit coverage= 100%, between model( 288 aa) positions 1;  
 288 length is 277aa with 14 gaps, 3 stops, absolute  
 frame= Minus3"  
 CDS complement(472722..471920)  
 /colour="255 0 0"  
 /evidence=predicted  
 /translation="YRIHXLKXRVFTGAKAAIQSLAELT--QMVEN--HKG--NECDD  
 SLTLKQS VYFID----CF SRLLXS k1KG YCVNHKRVARLMRQIGIMAKTKVKRK  
 RTTNSEHSfPRYGNRVLNLS-IDHPEQVWVADITYIRLQQE FVYLA VVMDVFTRAIRGW  
 HLSR HIDQQLT LRALNKALER-A TPE--IHHSQDGQVQYAAAAYMQLLQQHQVQISM  
 AEVGQAWQNGYAERLMRTIK-EEEVDL-SDYRNFT EAYEHIEQFLEDVYMHKRIHSSLGY  
 LTPCEYEQQWR"  
 /note="IS3\_IS3\_ORF1 e-value= 1.8e-35 complete sequence  
 hit coverage= 100%, between model( 286 aa) positions 1;  
 286 length is 268aa with 19 gaps, 3 stops, absolute  
 frame= Minus3"

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CDS complement(472551..471914)
/colour="255 0 0"
/evidence=predicted
/translation="SKLKGYCVNHKRVARLMRQIGIMAKTKVK-RKRTTNSEHSfpRY
GNRVLNLS--IDHPEQVWVADITYIRLQ-QEFVYLA VVMDVTRAIRGWHL SRHIDQQ
LTLRALNKALERAT---PEIHHS----DQGVQYAAAAYMQLLQQHQVQISMAEVGQA
WQNGYAERLMRTIKEEEVD--LSDYRNFT EAYEHIEQFLEDVYMHKRIHSSLGYLTPC
EYEQQWRQO"
/note="IS3_IS150_ORF2      e-value= 3.3e-35 fragment hit
coverage= 57.58%, between model( 389 aa) positions 166;
389 length is 213aa with 14 gaps, 0 stops, absolute
frame= Minus3"
CDS complement(472548..471917)
/colour="255 0 0"
/evidence=predicted
/translation="KLKG YCVNHKRVARLMRQIGIMAKTKVK----RKRTTNSEHSF-
PRYGNRvlNLSIDHPEQVWVADITYIRL---QEFVYLA VVMDVTRAIRGWHL SRHID
QQLTLRALNKALER---ATPEIHHS DQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQ
NGYAERLMRTIKEEEVDLSDYRNFT--EAYEHIEQFLEDVYMHKRIHSSLGYLTPCEY
EQQWRQ"
/note="IS3_IS150_ORF1      e-value= 2.3e-40 fragment hit
coverage= 72.55%, between model( 306 aa) positions 85;
306 length is 211aa with 13 gaps, 0 stops, absolute
frame= Minus3"
CDS complement(472548..471920)
/colour="255 0 0"
/evidence=predicted
/translation="K-LKG YCVNHKRVARLMRQIGIMAKTKVKRKRTTNSEHSfPRYG
NRVLNLS-IDHPEQVWVADITYIRLQ QEFVYLA VVMDVTRAIRGWHL SRHIDQQLTL
RALNKALERA-TPE--IHHS DQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAER
LMRTIK-EEEVDL-SDYRNFT EAYEHIEQFLEDVYMHKRIHSSLGYLTPCEYEQQWR"
/note="IS3_IS3_ORF1      e-value= 2.3e-45 fragment hit
coverage= 75.52%, between model( 286 aa) positions 71;
286 length is 210aa with 7 gaps, 0 stops, absolute frame=
Minus3"
CDS complement(472539..471908)
/colour="255 0 0"
/evidence=predicted
/translation="GYCVNHKRVARLMRQIGIMAKTKVKRKRTTNSEHSFPRY---GN
RVLNLSIDHPEQVWVADITYIRLQ QEFVYLA VVMDVTRAIRGWHL SRHIDQQLTLRA
LNKALER---ATPE---IHHS DQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAER
LMRTIKEEEVDLSDYRNFT EAYEHIEQFLEDVYMHKRIHSSLGYLTPCEYEQQWRQ
QNN"
/note="IS3_IS3_ORF2      e-value= 7.7e-58 fragment hit
coverage= 76.74%, between model( 288 aa) positions 68;
288 length is 211aa with 10 gaps, 0 stops, absolute
frame= Minus3"
CDS complement(472530..471890)
/colour="255 0 0"
/evidence=predicted
/translation="VNHKRVARLMRQIGIMAKTKVKRKRTTNSEHSFPRYGNRVL-NL
SIDHPEQVWVADITYIRLQ QEFVYLA VVMDVTRAIRGWHL SRHIDQQLT-LRALNKA
LERATPE-----IHHS DQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLM
RTIKEEEVDL---S-DYRNFT EAYEHIEQFLEDVYMHKRIHSSLGYLTPCEYEQQWRQ
QNNHYCMNK"
/note="IS3_IS51_ORF1      e-value= 9.6e-44 fragment hit
coverage= 73.94%, between model( 307 aa) positions 81;
307 length is 214aa with 13 gaps, 0 stops, absolute
frame= Minus3"
CDS complement(472518..471905)

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/colour="255 0 0"
/evidence=predicted
/translation="RVARLMRQIGIMAKTKVKRKRTTNSEHSFPRYGNRVL-NLSIDH
PEQVWVADITYIRLQQEFVYLAQVMDVFTRAIRGWHLRHIDQQLTLRALNKALERAT
PE-----IHHSDQGVQYAAAAYMQLLQQHQVQISMAEVGQAWQNGYAERLMRTIK
EEEVDLSDYrnFTEAYEHIEQFLEDV--YMHKRIHSSLGYLTPCEYEQQWRQQNNH"
/note="IS3_IS51_ORF2 e-value= 1.8e-35 fragment hit
coverage= 67.51%, between model( 317 aa) positions 96;
309 length is 205aa with 11 gaps, 0 stops, absolute
frame= Minus3"
CDS complement(470568..470162)
/colour="255 0 0"
/evidence=predicted
/translation="MSLVRPISTESLRLLHRIYHSSRHQVRQRAHCLILFAOGWPPY
TLASLFSVSPKTIVYNWLKAQNNRG---FAGLYNHPGRGRKPMFNPDQQQIYEWT-QA
SPIQ-----LNQVLAQIEQQWSVRVSKATVKRVLQMDMSWHR"
/note="IS630 e-value= 3.4e-15 fragment hit coverage=
39.63%, between model( 376 aa) positions 1; 149 length is
136aa with 13 gaps, 0 stops, absolute frame= Minus3"
CDS complement(470508..470171)
/colour="255 0 0"
/evidence=predicted
/translation="SSRHQVRQRAHCLILFAOGWPPYTLASLFSVSPKTIVYNWLKA
NNRGFAGLYNH---PGRGRKPMfNPDQQQIYEWTQASPIQLNQVLAQIEQQWSVR--
-VSKATVKRVLQMDMS"
/note="IS481 e-value= 3.5e-09 fragment hit coverage=
33.62%, between model( 351 aa) positions 1; 118 length is
113aa with 6 gaps, 0 stops, absolute frame= Minus3"
CDS complement(260016..259754)
/colour="255 0 0"
/evidence=predicted
/translation="LFYFLMQCPLCGHPK-THKHGKTSKGSQRYRCPHCQQTFS-Etf
DTLCYRRQiSPETIQTILQAHVEGSSLRGLSRITGVAYNTCVSVVR"
/note="IS1_ORF1 e-value= 1.7e-15 fragment hit coverage=
36.40%, between model( 239 aa) positions 1; 87 length is
88aa with 2 gaps, 0 stops, absolute frame= Minus3"
CDS complement(260016..259316)
/colour="255 0 0"
/evidence=predicted
/translation="LFYFLMQCPLCGHPK-THKHGKTSKGSQRYRCPHCQQTFS-Etf
DTLCYRRQiSPETIQTILQAHVEGSSLRGLSRITGVAYNTCVSVVRSA---SHKSQMI
HNGEVQAVAT---DVINADELWSFVKkskstVSRRSXGXATAGXHVLRKRVVSCVA
VLADIPTSXlknxLKILRAKPPVIIGK-----RMVGKGTH----DNYPMRSS
MKXVKXPNAxsgpmascVSRPGVGIDDRINLA-KSGNRV"
/note="IS1_ORF1 e-value= 2.6e-07 complete sequence hit
coverage= 100%, between model( 239 aa) positions 1; 239
length is 234aa with 24 gaps, 7 stops, absolute frame=
Minus3"
CDS complement(220944..220250)
/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHOSLHHFLSESPWVAS
hLSDkrLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK
PQIAAGMIRQLQGMGFCFELVLADSLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP
AEQAVFAEPWQS FERTFSNGTTETTRYrQEIIYGqrhhQKRY"
/note="IS4 e-value= 4.7e-14 fragment hit coverage=
51.23%, between model( 486 aa) positions 1; 249 length is
232aa with 27 gaps, 0 stops, absolute frame= Minus3"
CDS complement(220944..219818)

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/colour="255 0 0"
/evidence=predicted
/translation="FKHLHLGMIsDIKRKSLPAIARAVGLENHQSLHHFLSESPWVAS
hLSDkRLDIILKILDGRRLILLID-----ETGDCKKGKSTDYVKR
QYIGNVGKKENGIVAVTAYGLFQGMILPLSFEVYKPR-----ErLKEEDEYLSK
PQIAAGMIRQLQGMGFCFELVLADSPLYGEAQTNFVNVLLEELKLPYILAIRSNHAVWLP
AEQAVFAEPWQSERTFSNGT-----TETRYR
QEIIYGQRHHQKRyWLLTDPOTLPENSTS-----YVMAA
APE---IKLDEIGDCYGFRTWIEYGLQSKD-TLGWADFRMTHYEQIEKWWEIVMSA
FLMVSLFADVFNDS-----CPVAHQHFAQHPwWDNQNG
WKNLLNNVR--LIIQPLIS---WNLLKRWLEVFPSRALKKGF"
/note="IS4 e-value= 9.9e-07 complete sequence hit
coverage= 100%, between model( 486 aa) positions 1; 486
length is 376aa with 117 gaps, 0 stops, absolute frame=
Minus3"
CDS
complement(127077..126635)
/colour="255 0 0"
/evidence=predicted
/translation="DYLIAVKRNQGRLYDHLQTYFeCLKPMAEHTHS----IQSRGR
EEHRCIQVYEPVGI---ALQEWEAIRSVLCVQRWGTRQGKAY---HNTAYYISSAAT
SPHH---WQSLVREHWGIENRLHWPKDVVFGEDDYRLEDEQALLNWSVLRTIVINLR
LNG"
/note="ISAs1 e-value= 2.4e-27 fragment hit coverage=
41.65%, between model( 389 aa) positions 198; 359 length
is 148aa with 15 gaps, 0 stops, absolute frame= Minus3"
//
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