

Primers

Target gene (bp)	Forward primer (5'-3')	Reverse primer (5'-3')
NOD1	CCTCCTCCCGTCCGTCC	TCAGAAGCAAATGATCCG
NLRC3(1~936)	ATGGAAGAGGCTTGGATCAG	CTCCGTCATGCGGTCTAC
NLRC3(676~1507)	CCCCACATCACGGAACCCAAC	GATCGAATATCGCCCGCTTG
NLRC3(1433~2482)	ATTTCTCCCACTTAACCATAC	CCGAGCCGTTGTCTCTCTAC
NLRC3(2216~3276)	GCCCATCGGGAGCGAAAGC	TCACACCACCACCACGCAG
NLRP3(1~1024)	ATGGCAGGAGAAGAAAGCACC	AGGCCACATCTGCTTTACTG
NLRP3(676~1782)	TGCCCTCAACAGCGAATGC	GAAACTGCCCAACACGCTC
NLRP3(1423~2202)	CTCTTCGCAGCGATGTTTTAC	TCACCGCAGGACACGCAGC

>NOD1-chicken

MEGHLKANLKTSVEKPLTTSPPSICIALLKVYRELLVSKIRHTQCLIDNLINNEYFSTEDAEIVVQFPTQ
ADKVRKILDLVQSKGEEVSEYFICVLQKVTDAYYELQPWLDEIGYQPSENICSKPVVNTDPVSRYCQKL
RYELGRDSKFLVLSYAQREEMLEEIYSNSIMEMVNFTNESLGEVCQLQALFDDAVGVINEDGETIYVFG
DAGIGKSILLQKIQSLWAKKQLDIGAKFFHFRCRMFSCFKEDEAVCLKDLLFRYNCYPDQDPTEVFHH
ILQFPHTVLFTFDGFDEIYSNFDLSSVPEMCSPDEPMHPLVLLVSLLRGKLLKGSKKILTARTGTEIQR
NIIRKKVLLRGFSNSNLKEYTAMFFKDVGQRTLVLNLQLEANPNLCSLCSVPLFCWIIFKCYEHFHSMTD
SHELDPDCSVTLTDVFLLMIEVHLNRSLKTSLLKNNTRSQAQEVFRSRKETLLALGKIAIRGMGNSIFIFE
QEEVSSANISEEDLQLGFLRTVKGYSRCDNQSTYEFHLTLQSFFTALFLVIEERVGNKELLQFFNECS
SAEAAQRTCFRVPWLKKPLTGEDPFRNNEHFHTNLFCLGILLSRSKEKLFKHLVSPAVIRKKRKLITY
LGESMKSHLKGVTRSRPLMYNQVQVQPNFVWMLRCLYETQSEKVGKLAAKRMHANYIKLTYCNAYSADC
SAISFVVHHFQKHLALDLNNDYGVKQLLPCFSKLAVIRLSVNQITDHGARILYEELSKYQIVSYL
GLYNNQITDIGAKYVAKLIEECSSLEYVKIGANKITSEGGKCLAQAIQKSTTMFEIGMWGNQVGDEGAK
AFADALRNHPRLTNVSLAFNGITTEGGKSIAEALQHNDSVKIFWLTKNELDDEAAMSFAEMLKINKKL
VHLWLIQNQITAKGVKYLSEALKENTAIKEVCLNGNLISQEEAKAFESEERIICF

>NLRC5-chicken-AEY11256.1

MQPTLQNDFFNLEGAVASIRPQLVEFLSHRLDWLLSASQHFLLPTAVLSGLAGVTDHREKVSVLLDLLEK
AGHATWKQFAQCLCMECDLPLEMEILLMSSAGEGNLTQKQEAQTDASDQSSVPRGLTRRRRSSPISDK
GAKQKRLDSAKEYQRLVDSICKRYGSRRAAGAAAQEPQPLAFSQAQFVNLVLRQSKASRLKERTDKPR
EDVPSAPEPEECVDTAVRVSDLFGSVVRSGTTKVIIFLFGKPGTGKTMHHRICQKWAEGVLHQFLFTFL
FEFRQLNLLKRKLTLKELLFDLFLQPEDSPDAVFQHLLENAQRTLIIFDGLDEFVGNMDVSSASKGSLN
RSSSMSISELFAELCHGNLLPGCTVLVTSRPKRVPDFLINTVDLLAEVWGFDEKVEEYVSHYFRHHSF
KEQAIHLKNNTKLLSMCQIPALCYVVCICLEYLLKHQTSVELPQMTQFYIKMLLIFINKQQGEHAG
DEEAQLNSNKKAILGLCDLALKGLEAKKLVFVYVDIPEHVKEFASLHGLLTVFEVKTNSAHPETGYAFV
HLSLQEFFAALCLMISKSVDKSHLKRKLSLKSQWTLRNEAKTGMESFHIIFLSGLSSKECRTFIMLLAE
QSEAWVQDKQDAILQSLKKLAATQLTGPKVIELCHCTFETQGLEVAQHIGSLLNFKYEFKNFRLTPLDM
SALVFVINSQGDVTHLDFAGCPLDTCLEMLASCRNVEHLSFRSRRFGDDFAAALSKGLGEMGSLKKLE
VTGGSITAAGLTDMVQALSHCLQLEEINLQDNRIQNPDKVTVMELFSRMEKLLKIDLSKNSLSLNAVLL
LAKEFIACQNAELHVRKDTVIIISFSGPSGKVPRLDLKREQNKECVTPTRHLRLCLQARCLSSQHAKE
IVSILQSCPHLSEVDLSDNKLGDGCSFLLNLSWISISKQLNLSHNLLSVTGIYSLLKAVNTCQRVVE

VEVSLYHNTAVLRFTEDEGEFASPPASREEPLYPTDDQWDDKENQTPVPSKKIRLTYCRFQASDLEKLCA
VLKECGSISELDLSNNYLGDEGLAQLLQFLPNLKTLSLKLNNHLSLSSVFCLAQSLCTLEHLETMDL
SLGRMQVVHLTFGDRIRLRRTSRWRRSFLVHPKHVTNGQCFRLRNCTVGPEDVTRLCQMLTQCTQLTEI
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HNRISQRGVLHLINTFTTSGNTTEVQVSLCSKATLI IKMTSRDDPRKILRLTECSFQPEHLEKLCVL
NCTNLTECISNNNTVDAAGLLRSLSKTPGPLKISIEEPWVCKLSVTSLELAVQAAGNITAIMICK
EKNLFQLGVRLPHCLEKVGSVVSRNLNEPEIKQACFYQRVHDKCTQLQELRWSHVELHDDTEMLVSIL
LPLPDLKKFELTSCSFTPTGIDCLITGLQRCQAI EELNLGHMKLGDAIPKLVFGLCEMPSLKRLILNH
NSIGDDGCSRLAEALSSMHCMEEINLGHNKIGDLGLINIAAVLLEMQNLKRIDLSGNCPSPAGGEKLME
ALANCKHLEELILSRNDFGDTAVKLALCLPHMNRKILHLQHNNIGPAGGTALARALMACELLEESL
SENNLGEGGIRALSEGLPRFEHLRKIELRLCGITDDASKLLSRGFQQCPAVEEIIILSWNALGDGGAQVL
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>NLRP3-chicken

MAGEESTIFLEALEGLTLEDQEFKKKLPHTDIKGGWNIGRDELEKVTHPSSLISYMGDSYGEAAMD
AISLFEEMNQDLAEKILDEKVKEYKQKYTEHVAREFLQYKEANSCLGENLSVRDRYTNLT IARKSWDQ
HGDEPGDVSSDVTVTQTLLPSKDGQVPPITVLVGASGMGKMTIRKVMMEWVEGTLCTQFDYVFCIDC
KELSFKEVSMVDLISKCCPQQRMAGRILGNPEKILFIFDSFEALGLPLAQPKDELSTDPTEAKPLET
TLLSLLRRTVLPESVLIATRPAALQSLGQCLEGKHYVEILGFSPAAREEYFHRYFGNDNKADVAFRFT
RGNEVLYSLCVIPVMSWTVCTVLERELYERNQLLACSKTTTQMIMFYLSWLMKHRVSNWQNLQQLHLK
LCSLAADGIWKHKVLFEEKEIEDQGLNQQLLSLFLNEKGLEKGDHVNVSFSLHLQELFAAMFYVL
EDQDGMVSDSRILAKDVNMLLESYHTRSMDLNVTVRLLFGLVNPKSVEYAGEGIGCRISLQPQEDLLRW
LQTRPRGTSHPREVMKIEDLDTFHLLFETNEKSFVQSVLGSFTGIALQDVKLTLYDQAALCFCIKQWAG
LLSVTLWSCSFHQHHRQEPAGKGLPRQSWRQEELHSPHPLCQALGHPGSSLQSLRLQWCGLTEGDSGA
LGTLLATLPSLVHLELGDGALGDDGVRMLCAGLRQPGCQLRVLR

>NLRC3-chicken

MEEAWISRYRRQLMRSISPQFLEEIIIGYLQRLDLLTVEEAGRAQEASSLPEQVRVVDILAGKGSHASQ
TLQSFIEETTNSQLYPLCAEPMVQKHLESLSQSFYGNLSLEIGSLQRLTNLLLVEGLTDIQKQEHDLQMEM
TKGLRNVSKSIPLEKFLPLSKVSIPPRISVTMGVAGIGKSTLVKLFVGRWAKGLINRDIMFVPLPTFR
ELNTYEKLSAERLIRSSFPHITEPNYISAGAARTLLILDGLDEFKTPLDFSNTVACTDPKKEIQVDNLI
TNIIRGNLLQEASIWVTSRPTAASQIPGGLVDRMTEIRGFRATEMKDFLDQMFLDNKDLSGQVLHHIKA
NRSLHIMCTVPGFCRIYGSSIGYYLKNSTGQPQEMTVAPKTLSEIYSYYFKMALSSDWPERRRET
QAVNNSKKVMGSLGRLAFYGLLKRKHVFYEQDMKAYGIDLSLLHSSSLCSRLLLKEDMQPTTAYYFSLT
IQEFLAAIYYYYTAAKRAIFDLFTESGMSWPKLGLNHFSAVQSLQAEDGQLDIFVRFLSGLLSPQVN
QLLSGWLLVKDEHNSYRSQAISFLQGCLNTNYVISSQTVNTVHCLHEIQHTEIAKAVEEAMKNESLAGM
LTPVNCSALAYLLQVSDVCVEETNLSNCLTYNICKSLPPLLFCHSLRLDNNQFKDNVMELLSGMSLVK
DCQIQRLSLAENQICNKGAKALARSMLMVNRSLTVLDPRSNSIGPSGAKALADALKKNQVLLSLRLQHN
IKEEGAAALAEALLTNRRILTLHLQKNSIGAHGARKLAEALQNCSELMLSSNSVGDNGSVALAEAL
KVNHSLQSLDLQSNFISNTGVSALTAALCSNKGTLNLRENSISKEGGPAIAHALRTNCTLRKDLAA
NLLHDEGGKAIAMKENRALTSHLQWNFIQTQAAVALAQALQSNDSLASDLQENAIGDEGMAALAA
ALKVNTTLADLHLQVASISAAGAQLAEALMVNNSLQVLDLRGNSISVAGAKAMANALKVNRSLRWLNL
QENSLGMDGAICIAALRGNHGLTYVNLQGNRIGQSGAKMISDAIRTNSPDCVVV

>NOD1-avian-ancestor

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RYELGRDSKFVMSYAQREEMLLEEIYSNSIMELVSFTNESLGEVCQLEALFDDAVGLINEDGETIYVFG
DAGIGKSILLQKIQSLWARKELDIGAKFFFRFCRMFSCFKEDAICLKDLLFKYNCYPDQDPTEVFHH
ILQFPHTVLFTHFDGFEIYSNFDLSSVPEMCSPNEPIHPLVLLVSLLRGKLLKGSKKILTARTGTEIQR
NIIRKKVLLRGFSSNNLKEYTAMFFKDEGQRTLVLNQLEANPNLCSLCSVPLFCWIIIFKCYEHFHS MFD
SHEL PDCSVTLTDVFLLMIEVHLNRSLKTSLLKNNTRSQAEMFKSRKETLLALGKMAYKGMENSFFIFE
QEEVSSANISEGDLQLGFLRTVKGYSRCDNQSTYEFHLHTLQSFFTALFLVIEEKVGAKELLQFFNECS
STETAQPTCLRIPWLKKQLAGEDPFRNNEHFHTNLFCLGLLSRSKQKLFRLVSPAVIKRKRKTLITY
LGESMKSHLKG LTRSRLPNYNQVQVQPNFVWMLRCLYETQSEKVGKLA AKRMHANYIKLTYCNAYSADC
SAISFVVHHFQKRLALDLNNDYGVKQLLPCFSKLAVIRLSVNQVTDHGVRILYEELSKYQIVSFL
GLYNNQITDVGAKYVAKLIEECSSLEYVKIGANKITSEGGKCLAQAIQKSKTMFEIGMWGNQVGDEGAK
AFAEALRNHPRLTNVSLAFNGITTEGGKSIAEALQHNNSVKIFWLTKNELDDEAAMSFAEMLKVNKKLV
HLWLIQNQITAKGVKYLSEALKENTAIKEVCLNGNLISQEEAKAFENEERIICF

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AAAASCYPFPFLPFQCLGGSGLAGEDPFKNKDHQFTNLFCLGLLSKAKQKLLRHLVPAAALRRKRKALW
AHLFASLRSYLKSLPRVQSEGFNQVQAMPTFIWMLRCIYETQSQKVGQLAARGICANYLKLTYCNACSA
DCSALS FVLHHFRKRLALDLNNDYGVRELQPCFSRLTVIRLSVNQITDSGVKVLCEELTKYKIVT
FLGLYNNQITDVGARYVAKILDECKGLTHLKLKGNKITSEGGKCLALAVKNSKSIFEVGMWGNQIGDEG
AKAFAEALRNHPSLTTLSLAFNGISTEGGKSLAWALQQNTSLRIFWLTKNELDDEVAESLAEMLKVNQT
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DAKQQRLDSAEKYRHLLIDSICQRYGSRRAGAAAQEPTQPLAFNQAFVNLVIRQSKASRLKERTDKPR
EDVAGAPEPEECVDTAVKVSDFG SVVPSGTTKVIFLFGKPGTGKTMHRI CQKWAEGVLHQFLFTFL
FEFRQLNLLKRKLT LKELLFDLFLQPEDSPDAVFQYLLENAQHTLIIFDGLDEFVGNMDVSSSSKGGPT
LSSRMSISELFADLCHGNLLPGCTVLVTSRPKRLPDFLLNTVDLLAEIWGFDHEKV EYVSHYFHHSF
KEQAI AHLKNNTKLLSMCLIPALCYVVCICLEYLLKHQMSVELPQTM TQFYIKMLLIFINKQQGERAG
DEETQLNCNKKAILGLCDLALKGLEAKKLVFYVGD IPEHVKEFASLHGLLTVFEVKTS GTCPEAGYAFV
HLSLQEFFAALCLMVSKRVDKNYLKKKFSLSKSWTLKNEAKTEFMESFHIFLSGLSSKECRTFLMLLAE
QDEAWVQDKQDAILQSLKKLAATQLTGPKVIELCHCTFETQDLEVAQHIGSLLNFKYEFKNFRLTPLDM

SALVFVINSQDLTHLDFAGCLLDIDCLEVLAGCKNVEHLSFRSRRCGDDFAAALS KGLRGMGSLKKLE
LTGGSITAEGMTNLVQALSHCLQLEEINLQDNRI RDPEVKRVMELFSRMEKLLKKIDLSNNNLSLNAVL I
LAKEVIACQNATELRVRKDTV IISFSGPSGKVP RSLDLRWEENKEHVIPTRHLKLCLQDRCLSSQHAK E
IVAILQSCPCLSEVDLSGNKLGDEGCSFLLES LPWISISKQLDL SHNRLSVTGICSL LKAVNTCQKVME
VQVSLCHKTAVLRFTEDREFASLP PREEPVFSTDDQQYGEENQTPTASKKIRLTYCRFQASDLEKLC AV
LKECGSISELDLSNNYLGD ELLQLFQFLPNLKMRLSLKLNQSLNSVFFLAQSLSTLEHIKTMNLS
LGHMQVVHLTFGERIRVRSTSRWRSDSFLAHPKHVANGRCFRLRDCRVGPEDVTRLCQILAQCPQLTEI
DLSGNSLSDQSIERLLSFLPYLCQLTLLSIRNNTFSRPRCTVLLINSINLCERIRMVEVRSSENAFLHLR
ASTQSQKTSCLTDCAIGQGQIEELCRVLEQHGCLAELDL SRNQLGD EGLRCLLDHLHRVPVTC SLNLS
HNRI SQDGVHLHINAFATSGNTTEVQVSLCSKATLI I KLT SRDDPRKILRLAECNFQPEHLEKLC LLL E
KCTDLTEYISSNNNVTVQAAERLLHSLRKTGLPLKISIEEPWVCKESVTN LLELAVQACGNITEITICK
DKNLFQLGVRFPHCLEKVESVVSRLNLYKPEIKHACFYQ RVREKCAQLQELRWSHVELHNDEAEMLVSI
LLPLPELKKFGLTSSSIMPTGIDY LITGLQNCQAIEELNLGHMKLSSAAIPKLV LGLCEMPSLKRLILN
HNSIGNDGCSRLAEALRNMHYMEEINLSHNKIGDPGLINLAAVLLEMQNLKRIDLSGNCPSPAGGEKLM
EALAYCKHIEELILSRNGFGDRTAVKLALCLPHMTNLKILHLQHNNIGPAGGMELARALVVC ELL EIS
LSENDLGE GSIHALSEGLPCFEHLRKIDLKL CGITDDASKSLSHGFRQCPAMEE IILSWNALGDGGAQE
LASVLP GMEKLM LDLEKNRIGACGATKLAEE LAKCPEIQFIRLWDNPVPKGLAESLTSQDPRLCF SFC

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MDPVSLQLGNKNLWSWLVRLLSKDPEWLN AKVKFFLPNMDLSRNEALDPTQRVILQLNKLHAQGPATW
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DVSILDLFNTKANKGPRVTVLLGKAGMGKTTLAHRLCQKWADGQLDRFQALFLFEFRQLNLITRFLTLP
QLLFDLYLSPEADPD AVFQYLEENADQVLLIFDGLDEALQPCSSKETVGPDDPGSALT LFSGLCHGTLL
PGCWVMATSRPGKLPA CLPTEAMVHMWFGDGRVEEYVNHFFSDQPSQE AALAE LRANGLR LRS MCAVP
ALCQVACLCLHYHLLPGSSPGQSAALLPTMTQLYVQMV LALSPRGHLPAT SLLGLGEVALRGLETGKVI
FSAEDIPPLMAFGAAHSLLTSFCIRTGPGHQETGYAFTHLSLQEFFAALHLMASPKVDKDTLTHHVTL
NSRWVLR TKARLGLSDHLPTFLAGLASRTC RPFLSHLAQRDEVWVGAKQAAVVQVLRKLATRKL TGPKV
VELCHCVGETQEPELASLIAQSLPYQLPFHNFPLTCADLATLTNILEHRDAPIHLDFDGCPL EPHCPEA
LVGCGQVENLSFKSRKCGDAFAEALSRS LPTMGSLKMLGLAGSKITARGISHLVQALPLCPQLEEVSFQ
DNQLKDQEV LNIVEVLPCLPRLQKLDLSRNSVCMSTLLCLAKVAVTCPTVRMLQVREADLIFLLSP PTE
TAAELQGAPDLQGND SQRKGAQSRSLTLRLQKCQLRVHDAEALIAL LQEGPHLEEVDLSGNQLEDEGCR
LMAEASQLHIARKLDLSDNGLSVAGVHCVLR AVSTCRTLAE LHISLLHKT VVLTFAQEPEEQEGIQKR
AAFLDSLMLQMPSELPLSSRRIRLTHCGFQAKHLEQLCKALGGSCHLGHLDSLGNALGDEGVAQLAQLL
PGLGPLQSLNLS ENGLSLDAVFSLAQCFSTLQWLFHLEISFESQHILLRGDR TGRDMLAAGSLPEFPAG
AQFLGFGQRCIPRSFCLRECQLEPLSLTHLCDTLEKCPGPLEVQLSCEFLSDQSLETLLHRLPQLPQLS
LLQLSQTGLSPRSPFLLADIFSLCPRVQKVDLRS LRHATLHFRSNEEQEGVCCRFTGCSLSQE HVEPLC
WLLSKCKDLSQLDLSANLLGDSGLRCLLECLPQVPISGSLDSLHNSISQESALYL VETLPSCPRVREAS
VNLGSEQSFRIHFSREEEAGKTLRLSECSFRPEHVSRLATGLS QSLQLTELTLTQCCLGLEQLTILLSL
VRRPAGLFSLRVEEPWVG RAGVLTLLVEVCAQASGSVTEISIS E TQQQLCVQLEFP RQEENPEAVALRLA
HCDLGTHHSLLRQLMETCARLQQLSLSQVNLCEDD DASSLLLQSLLLSLSELKTFRLTSSCVSTEGLA
HLASGLGHCHHLEELDLSNNQFGEEGTKVLMGALEGKCR LKRLDSLHLPLDSSTLALLTQGLSHMTLLQ
SLSLSRNSIGDVGCHLSEALRAATSLEELGLSHNQIGDTGAQH LAAILPGLPEL RKIDLSANSIGPAG
GVQLAESLALCRHLEELMLGCNALGDPTALGLA QGLPQH LRVLHLPSSH LGPEGALSLAQALDGCPHVE

EISLAENNLAGGVPHFCKGLPLLRQIDLVSKIDDQTAKPLAASFTLCPALEEILLSWNLLGDEAAAEL
AQVLPQMGRCLKRVDLEKNQITACGAWLLAEGLAQGSGIQVIRLWNNPIPPDMAQRLQSQEPRLDFAFFD
NQPQAP