

**Supplemental table S1:** Nucleotide variability of miR171 binding sites in mRNA of HAM orthologous genes

<i>Organism</i>	Gene accession	Region of CDS in mRNA of HAM orthologs (the conservative sequence is set in bold)
<i>A. thaliana</i>	AT2G45160	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACCAUCU
<i>A. thaliana</i>	AT3G60630	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAACCU
<i>A. thaliana</i>	AT4G00150	UCAGGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>A. lyrata</i>	ARALYDRAFT_483651	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACCAUCU
<i>A. lyrata</i>	ARALYDRAFT_486537	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAACCU
<i>A. lyrata</i>	ARALYDRAFT_490555	UCAGGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>B. distachyon</i>	LOC100822245	ACGCGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UAUCGGCU
<i>B. distachyon</i>	LOC100828697	GCGAGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>B. distachyon</i>	LOC100834684	GCGCGA <b>GAU</b> ACUGGCACGGC <b>UCAA</b> UAUCGGCU
<i>B. distachyon</i>	LOC100841394	CAGGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACCAUGG
<i>G. max</i>	LOC100792973	GCAUGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACCAACU
<i>G. max</i>	LOC100801785	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>G. max</i>	LOC100805945	GCACGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACCAACU
<i>M. truncatula</i>	MTR_4g026490	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>O. sativa</i>	Os02g0662700	GCGAGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>O. sativa</i>	Os02g0663100	GCGCGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>O. sativa</i>	Os04g0555000	GCGAGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UAGCAGCU
<i>O. sativa</i>	Os10g0551200	CCGCGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UAACGGCU
<i>P. patens</i>	PHYPADRAFT_143602	UAAAGC <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UAGCACAU
<i>P. trichocarpa</i>	POPTR_409708	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>P. trichocarpa</i>	POPTR_591663	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>P. trichocarpa</i>	POPTR_784409	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>P. trichocarpa</i>	POPTRDRAFT_409708	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>R. communis</i>	RCOM_1062060	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>R. communis</i>	RCOM_1610560	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>S. bicolor</i>	SORBIDRAFT_01g029650	CCGCGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UAUCGGCU
<i>S. bicolor</i>	SORBIDRAFT_01g050333	CCGCGA <b>GAU</b> ACUGGCAGGC <b>UCAA</b> CUACCTGCU
<i>S. bicolor</i>	SORBIDRAFT_04g032570	GCGAGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>S. bicolor</i>	SORBIDRAFT_04g032590	GCGAGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>S. bicolor</i>	SORBIDRAFT_06g024820	GCUCGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UAGCAGCU
<i>S. moellendorffii</i>	SELMODRAFT_453332	UCAGUC <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UAGCAUUU
<i>V. vinifera</i>	LOC100267664	GCAAGG <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>Z. mays</i>	LOC100272800	GCGCGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACGGCU
<i>Z. mays</i>	LOC100279263	GCGAGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>Z. mays</i>	LOC100279420	GCGAGC <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UACAGCU
<i>Z. mays</i>	LOC100381701	GCGCGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UAGCAGCU
<i>Z. mays</i>	LOC100382187	GCGAGA <b>GAU</b> AUUGGCGCGGC <b>UCAA</b> UAGCAGCU

**Supplemental Table S2: Amino acid variability of HAM orthologous proteins in regions with the ILARLN oligopeptide**

<i>Organism</i>	Gene accession	Region of HAM orthologous protein (the conservative sequence is set in bold)
<i>A. thaliana</i>	AT2G45160	TVLAQG <b>ILARLN</b> HHLNTS
<i>A. thaliana</i>	AT3G60630	PVLAQG <b>ILARLN</b> HNLNNN
<i>A. thaliana</i>	AT4G00150	TCLAQG <b>ILARLN</b> QQLSSP
<i>A. lyrata</i>	ARALYDRAFT_483651	TVLAQG <b>ILARLN</b> HHLNTS
<i>A. lyrata</i>	ARALYDRAFT_486537	PVLAQG <b>ILARLN</b> HNLNNN
<i>A. lyrata</i>	ARALYDRAFT_490555	TCLAQG <b>ILARLN</b> QQLSSP
<i>B. distachyon</i>	LOC100822245	AHGARE <b>ILARLN</b> YRLPAA
<i>B. distachyon</i>	LOC100828697	STGARE <b>ILARLN</b> HQLPPV
<i>B. distachyon</i>	LOC100834684	GFGARE <b>ILARLN</b> HRLPAA
<i>B. distachyon</i>	LOC100841394	STGARE <b>ILARLN</b> HHLPLP
<i>G. max</i>	LOC100792973	LELAHG <b>ILARLN</b> HQLSPI
<i>G. max</i>	LOC100801785	PVHAQG <b>ILARLN</b> HQLSPI
<i>G. max</i>	LOC100805945	LELAHG <b>ILARLN</b> HQLSPI
<i>M. truncatula</i>	MTR_4g026490	PVQAQG <b>ILARLN</b> HQLSPI
<i>O. sativa</i>	Os02g0662700	SVGARE <b>ILARLN</b> QQLPQL
<i>O. sativa</i>	Os02g0663100	SVGARE <b>ILARLN</b> QQLPPL
<i>O. sativa</i>	Os04g0555000	SIGARE <b>ILARLN</b> QQLPPI
<i>O. sativa</i>	Os10g0551200	AFGARE <b>ILARLN</b> YRLPAA
<i>P. trichocarpa</i>	POPTR_409708	PVLAQG <b>ILARLN</b> HQLSVP
<i>P. trichocarpa</i>	POPTR_591663	PVLAQG <b>ILARLN</b> HQLSLP
<i>P. trichocarpa</i>	POPTR_784409	FLHAQG <b>ILARLN</b> QQLSPT
<i>P. trichocarpa</i>	POPTRDRAFT_409708	PVLAQG <b>ILARLN</b> HQLSVP
<i>P. patens</i>	PHYPADRAFT_143602	AEMAKA <b>ILARLN</b> QHISPS
<i>R. communis</i>	RCOM_1062060	FSHAQG <b>ILARLN</b> QQLSPI
<i>R. communis</i>	RCOM_1610560	PALAQG <b>ILARLN</b> HQLSLS
<i>S. bicolor</i>	SORBIDRAFT_01g029650	AFGARE <b>ILARLN</b> YRLPAV
<i>S. bicolor</i>	SORBIDRAFT_01g050333	VLGARE <b>ILARLN</b> YLLPPA
<i>S. bicolor</i>	SORBIDRAFT_04g032570	SIGARE <b>ILARLN</b> HQLPPL
<i>S. bicolor</i>	SORBIDRAFT_04g032590	SIGARE <b>ILARLN</b> HQLPPL
<i>S. bicolor</i>	SORBIDRAFT_06g024820	SIGALE <b>ILARLN</b> QQLPPV
<i>S. moellendorffii</i>	SELMODRAFT_453332	NHVAQS <b>ILARLN</b> QHFLCH
<i>V. vinifera</i>	LOC100267664	TILAQG <b>ILARLN</b> HQLSPI
<i>Z. mays</i>	LOC100272800	STGARE <b>ILARLN</b> HRLPSP
<i>Z. mays</i>	LOC100279263	SIGARE <b>ILARLN</b> HQLPLL
<i>Z. mays</i>	LOC100279420	SIGARA <b>ILARLN</b> HQLPPL
<i>Z. mays</i>	LOC100381701	SIGGRE <b>ILARLN</b> QQLPPI
<i>Z. mays</i>	LOC100382187	SIGARE <b>ILARLN</b> QQLPPI