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-----MQGTL
Arabidopsis VIP2 -----MQGTL
Arabidopsis NOT2
Rice NOT2 MSGLLNSNLNNSASNLQDSTGRFPTGSFSGQSGSVPGGFHHSGLNHMHGSLNPNMFGSF
Mouse NOT2 -----MVRTDGHTLSE
Human NOT2 -----MVRTDGHTLSE

N. benthamiana VIP2 TSRTAINNVPSVSGVQSGNNLSGGRFVFNLPALSQIPQGNSHGHSGMTSRGGTSVVG
Arabidopsis VIP2 TSRNSSMNSIPASGVQPNGSFSSGRFASNNLPVNLSQLSHGSSHGSGIPNRGL-NVVG
Arabidopsis NOT2 -----MSHGSSHGHSGLTNRGG-----
Rice NOT2 SQRNAAMSGLPSSGVQPPGGSMP-GRFASNNLPVGMGSIIPHGSHGSGSRGLNVGG-----
Mouse NOT2 KRNYQ-----MLASPSTSG-----
Human NOT2 KRNYQVTNSMFGASRKKFVEGVDSYHDEMYYSQSSMFPHRSEKDLASPSTSG-----

N. benthamiana VIP2 NPGYSSNTNGVGGSIPIGILPTFAAIGNRSSVPLGVSPILGNAGPRMTNSVGNIVGGGNI
Arabidopsis VIP2 NPGFSSNANGVGGSIPIGILSTSAGLSNRNSVPGMGISQLLGNNSGRPITNSMGMNVGGGNI
Arabidopsis NOT2 -----LGVSPILGNVGRMRTSSMGMNVGGGTM-----
Rice NOT2 -GPAFSSSLNIGGTTIQLGSSNLGAGGSRNSVPGMSVSPSLGNLGPRTIGSSVIVGGGSI
Mouse NOT2 -----QLSQFGASLYGQQSALGLLPMRGMNSNTPQLNRSLSQ
Human NOT2 -----QLSQFGASLYGQQSALGLLPMRGMNSNTPQLNRSLSQ

N. benthamiana VIP2 GRSISSGAGLSVPLASRLNMNANSVSGNLNVQGNRLMSGLVQQASPQVLSMLGNSYPA
Arabidopsis VIP2 GRNLISSG-GLSIPGLSSRLNLAANSVSGNLN-VQGQNRMMGGVLPQGS-QVMSMLGNSYHT
Arabidopsis NOT2 GRTLSSGGGLSIPSLGSRNLNLAANSVSGNI---GQNRMMGGVLPQGSQVLSMLGNSYPS
Rice NOT2 GRNLISSG-GLSVPSIASRMLNSGNGVSGGLNVQGSRRMNGILQQGSPQMLNMGSLYPT
Mouse NOT2 GTQLPSHVPTPTTGVPMTSLHTPPSPSRGILPMNPRNMNHSQVGGGI-VIPSRTNMSSS
Human NOT2 GTQLPSHVPTPTTGVPMTSLHTPPSPSRGILPMNPRNMNHSQVGGGI-GIPSRTNMSSS

N. benthamiana VIP2 GGP-LSQNHVQAIGNFNSMGLLNDVNSNDGSPFDIN-DFPQLSSRPSSAGGPQGLGSLR
Arabidopsis VIP2 GGGPLSQNHVQSVNN-----MMLSDHENDSSLFDINDDFPQLTSRPGSAGGTQGHGSLR
Arabidopsis NOT2 AGG-LSQNHVQAMNSLSSMGLLNDMNSNDTSPFDINDDFPQLTSRPSAG-SQGQLGSLR
Rice NOT2 SGGSLSQNHQIQGGNN-SLGSMLHDAADGAPFMS-DFPQLTGRPSSAGGPQGLGSLR
Mouse NOT2 GLGSPNRSSPSIIICMPKQPSRQPFVTNSMGGFMNRNQAFGMNSLSNIFNGTDGSEN
Human NOT2 GLGSPNRSSPSIIICMPKQPSRQPFVTNSMGGFMNRNQAFGMNSLSNIFNGTDGSEN

N. benthamiana VIP2 KQGL--SPTVQQNQEFISIQNEDEFPALPGFKGGNADYAMDPHQKEQLHDNTLSMQQQHF
Arabidopsis VIP2 KQGLG-VPLVQQNQEFISIQNEDEFPALPGYKGGNSEYPMDLHQKEQLHDNAMSMHNSQNF
Arabidopsis NOT2 KQGLGISPTVQQNQEFISIQNEDEFPALPGYKGGNSADYPMDLHKKQLHNSVLMQSSQLS
Rice NOT2 KQGVGVNTIVQQNQEFISIQNEDEFPALPGYKGGNTDYAMELHKKQLHDN-VPMVAQQQYP
Mouse NOT2 VTGLDLSDFPALADRNRRREGSGNPTPLINPLAGRAPYVGMVTKPANEQSQDQFSIHNEDEFP
Human NOT2 VTGLDLSDFPALADRNRRREGSGNPTPLINPLAGRAPYVGMVTKPANEQSQDQFSIHNEDEFP

N. benthamiana VIP2 MGRSAGFNLGGTYSSNRQQQLQHPASVSSGGVFSFNINQDLSLHGSDFVQSSSSSYQ
Arabidopsis VIP2 MGRSGGFNLGAYTSHRQQQQQAQAVSSSGVS-----LHGSDFSSSHPPYH
Arabidopsis NOT2 MRSVGFNLGNSYPPNRQQHQGANV-----
Rice NOT2 ALPGSSYKDPDTSNDSDSKSNLSTSGKT-----
Mouse NOT2 ALPGSSYKDPDTSNDSDSKSNLSTSGKT-----
Human NOT2 ALPGSSYKDPDTSNDSDSKSNLSTSGKT-----

N. benthamiana VIP2 QQQGGPPGIGLRPLNSSGTVSGIGSYDQLIQYQQHQGQSQFRLQMQMSTLQGFPRDQSLK
Arabidopsis VIP2 --TGGLQGLGLRPLSSPNAVSSIGY-DQLIQYQQHQGQSQFPVQMSINQ-FRDSMFK
Arabidopsis NOT2 SQTGGAPGIGLRSMNSANSITGMGYDQLIQYQQHQGQSAQYRLQMSAASQFPRDQSLK
Rice NOT2 -QNAGPPNIGLRPLNNSPNQTSLSGSEQLIQYQQHQGQSAQYRLQMSAASQFPRDQSLK
Mouse NOT2 -----TSSTDGPKFPGDKSSTTQNNNQQRKGIQVLPDGRVT
Human NOT2 -----TSSTDGPKFPGDKSSTTQNNNQQRKGIQVLPDGRVT

N. benthamiana VIP2 SMQS-QVAPDPFGMLGLLSVIRM--SDPDLTSLALGIDLTTLGLNLNSAENLYKTFGSPW
Arabidopsis VIP2 STQS---EADPFCLLGLLDVLR--SNPELTSLALGIDLTTLGLDLNSTGNLYKTFASPW
Arabidopsis NOT2 SMQSTQSNPDRFGLLGLLSVIRM--SDPDLTSLALGIDLTTLGLNLNSTENLHKTGSPW
Rice NOT2 SIQGGQTPSDPYGLMGLLVIRM--NDVDLSSLALGIDLTTLGLNLNSPDNLYKTFGSPW
Mouse NOT2 NIPQ-GMVTDFQGMIGLLTFIRAAETDPMVHLALGSDLTTLGLNLNSPENLYPKFASPW
Human NOT2 NIPQ-GMVTDFQGMIGLLTFIRAAETDPMVHLALGSDLTTLGLNLNSPENLYPKFASPW

N. benthamiana VIP2 SDEPAK-GDPEFTVPQCYAKQ--PPPLNQAYFSKFLQDITLFFYIFYSMPKDEAQLYAANE
Arabidopsis VIP2 TNEPAK-SEVEFTVPNCYATE--PPPLTRASFKRFSYELFFYTFYSMPKDEAQLYAANE
Arabidopsis NOT2 SNEPSK-VDPEFVPCYAKN--PPPLHQGLFAKLLVETLFFYVYFYSMPKDEAQLYAANE
Rice NOT2 SNEPAK-GEPEFHTPACYSAEQ--PPPLQPIHFQKQFPTLFFYIFYSMPKDEAQLCAASE
Mouse NOT2 ASSPCRQDIDFHVPSEYLTNIHIRDKLAAIKLGRYGEDLFFYLYMNGGDLQLLAAVE
Human NOT2 ASSPCRQDIDFHVPSEYLTNIHIRDKLAAIKLGRYGEDLFFYLYMNGGDLQLLAAVE

N. benthamiana VIP2 LYNRGWFYHREHRLVFMRVANMEPLVKTNAYERGSYICFDPNWETIHKDNFVLCHEMLE
Arabidopsis VIP2 LYERGWFYHKELRVWFFRVG--EPLVRAATYERCTYELDPSNFKTVRKEHFVIKYELME
Arabidopsis NOT2 LYNRGWFYHKEHRLVFRIG--EPLVKTNAYERGSYICFDPSNFEIVQKNFVLYYEMLE
Rice NOT2 LYTRGWFYHKEVRVWLRIPNVEPLVKTPHYERGSYICFDPNWETIRKDNFVLCHEMLE
Mouse NOT2 LFNRDWRHYHKEERVWITRAPGMEPTMKTNTYERCTYFFFDCLNWRKVAKE-FHLEYDKLE
Human NOT2 LFNRDWRHYHKEERVWITRAPGMEPTMKTNTYERCTYFFFDCLNWRKVAKE-FHLEYDKLE

N. benthamiana VIP2 KRPLVLPQH-----
Arabidopsis VIP2 KRPSLLQL-----
Arabidopsis NOT2 KRPSISQDSQH-----
Rice NOT2 KKPAPSSQNR-----
Mouse NOT2 ERPHLPSTFNYPNQAF
Human NOT2 ERPHLPSTFNYPNQAF

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Supplemental Figure S1. Alignment of proteins with the NOT domain from *Arabidopsis* and other genera.