

>DUF177A1_Oryza_sati va

-----MI GFGI GGVAGALPLVLRRTCTPPPP
-----MAMTPLH--H
TCSFFFRPQSP-----SLSHSPCAAAADDDFF-----TVDYD-----PEEEK-----
-----EEDEEGSPWEGAVVYRRDASVHHLEYATTLERLGLGDLSSSTHSRARAATMGI LI LSS
TNLTGTKDDTPVLVSLDVARR-RGRRLLDGI VRTVI TLGCFCAEPAPQGI FANFSLLLTEDRV-EEP-DVVDLGTI FE
EEQTKAPSLTGSQED-GDDEDI DWDDRLHFPAAGEKEI DI SKHI RDI I HLEI TLDALCSPTCKGLCLGCGENLN-TSSCSC
NAEKQQ--AKNVQR-----RGPLKDLLKPLQR-----

>DUF177A_Sorghum_bi col or

-----MGRARSCT-----

-----RRDAVVHLEYATTLERLGLGDLSSPDSRARAANLGLGLSGG
GQDGTAAQSQTPVLVSLDVTRR-RGRRLLDGI VRTVI TLGCFCAEPAPQGI FANFSLLLTEDPV-EEP-DVVDLGTI FE
EDI AKGASLAGTMDNQDDQDI DWDDRLHFPAADREI DI SKHI RDI I HLEI TLDVAVCPNCKGLCLSCGANLN-TSSCTC
NKGKPK-EPKNVKG-----RGPLKELLKPMQKR-----

>DUF177A2_Oryza_sati va

-----LVGETRRRRE
RPALLLPVTVPP-----
-----STVDRPPLRRLAAS-----
-----TLPPTASRATSPRRRPELQPPPRVNC--CAEPAPQGI FANFSLLLTEGRV-EEP-DVVDLGTI FE
EEQTKAPVLTGSQED-GDDEDI DWDDRLHFPAAGEKEI DI SKHI RDI I HLEI TLDALCSPTCKGLCVGCGENLN-TSSCSC
NTEKQAKAKNVQR-----RGPLKRPVETTAKVM-----

>DUF177A_Physcomi trel la _patens

MI PHI QLEI SENNPFYI HRLVI QLEPSGI RSTQDRRSSSSKRPVVAGDEARDLVGGAWTTSSAMATASSTSLPAAAPQOP
NVDSALGLQVHQLVACAELOSLHETRAVYKRGVFFRTTVKAAATKSQOQSLNQLVHMPAGFAEVGALDPDI SFHH--R
PRLHHLCAESSQHGRCEVASRASSYKOGGWVRSNVACLGLVLTSCSSRRQYLRCVNSRODTSNERFRDNSNFSPALRP
FI SRGHTRVLRQHNL PANPGVVEEEEOGTPWEGAI I FKRSAAQAQFEYVTTLERLGLTRFSSDKAMTLAFDMGL-----
GKVEVDGI VGTPLI SLDCSKEGRNDI RVDGI I RTALALVCNRCLAPCAERI FASFNLLLTDPV-EEP-TQPNLGVVGLG
DNPHI --WSAEADDDAEALDI DLDDKLHFPREEKELDI SKYLRDTI HLEI PAKSLCDNDCPGFCFGCGVNLN-TDTCRC
GKQKSKNNVNVEDLLGLNKNKDI WGPLLEQLKKQLEEQDRSDDSL

>DUF177A_Amborell a _tri chopoda

-----MAFSTLSCPLSPHLNHPQFS
SKPSAKT-----PSFNQLESHL
KPSKTLI SSSYS-----I SKPYTTRPI I SPSKGLI SI SSLHCTSETVS-----HESTE-----
-----EVEDEGSPWEGAVVYKRDSSVTHLEYCTTLERLGLGKLSDDVSNRASSMGI ---RV
TKGVTEYSSGTPVQI SI DVYRR-KQDI KLDGI LKTVI TLACNRCAEPAAECVFSDFTLTDEPI NEEN-DEMNFVLYG
DDKWRSYKNVGVGEEAREEVI DLDDRLYFPLEEREI DI SKHI RDAVHVEI TI DAI CDANCRGLCLECGVNLN-KSRCGC
GRKKNE---KRERE-----SSPLSGLKHQTYKO-----

>DUF177A_Arabi dopsi s _thal i ana

-----MSLVCSLSCVAPLPQTKQSRPSFLKLETCTLSLS
SPAGY-----PNFTTGI --R
KHI SYLFTEPI K-----LPRLAKSRI LVSQESFTETSTI DMD-----WEDQE-----
-----EI EDTGSPWEGAVVYRRNASVTHVEYCTTLERLGLGRLSTDVSKKRASAMGL---RV
TKDKVDYPDGTVPQVSDVI RK-KKKLRLDGI VRTVI TLGCFRCAEPAPQGI FANFSLLLTEEPV-EEP-DVI DLGFTFG
NDKEE-----GEDDDNDDSWI DWEDKLHFPPEVEKEI DI SKHI RDLVHLEI TI TAI CDSACKGMCLKCGANLN-KRKCDC
GREEKD-----KG-----YGPLGNLREQMQQKEGLRN--

>DUF177A_Zea_mays

-----MYYPQPTVSLAAAVALLR
-----PSLRRHS--Q
RASSLLRSSTPP-----PWVSARRRTAVSDDFF-----TVELDATGVEPEPDS-----
-----I DDGLPSPWEGAVVYRRDAAVQHLEYASTLERLGLGDLSSPDSRARAADLGL--AGG
TLDSTGAQPRTPVLVSDVTRR-RGRRLLDGI VRTVI TLGCFRCAEPAPQGI FANFSLLLTEDPVEEEP-----DLGTI FQ
EDDDKGGASLACAMD--GDQDI DWDDRLHFPAADKEI DI SKHI RDMI HLEI TLDVAVCPNCKGLCLTCGANLNTTSSCTC
KP-----RNVQG-----LSPLKGVFK-----

>DUF177B_Physcomi trel la _patens

-----MFPSSQQRWTHSLYSTHFVSDNAGAGVVKLRVLQYSQAVDMANVLLHTPRPSFS
TPWGVSDSRWC-----LGFESRCGAG
RVMGWCCRSGRV-----VVCTTGQHPPEPRKEFHVESKPVSKKLPKTNKKK-----
-----EGRERVLVLI TVNRSDGKW--ADSWNTE-----QVTTLKDLNLEDI STDS-----
SFQGPVKPKDLVHVELAVQKS-GWGFVQAQVRSVTRQCSRCFKTYFSPINGSFQAWLT--PTQDMF-VHPNGKSEEN
GDPTV-----VYFPLGEEEADLTRMVRDTI KLNYSAKAI CSEECDKLG-----PRTWEV
GGSQGR---PVDSR-----WLPLLKAKHNL-----

>DUF177B_Oryza_sativa

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-----MARACSPALRLQLPPNP
PI TPQL-----PSCRTHSAGA
RCRGFAAAHSQP-----PAAGRPDEPAAEPSPKQPEI AQTQNLRRSRRRG-PGSRQ-----
-----SLVSVGTSCTGGDQWSSD-----FDLTLRQLHLDDLIED-----
-----GQNDADVLVHLLVQOHTQFGMSI KGRVVTFSFSKI CDSCSSPYCAKI DEQFNLTVLSSTRKEQS-EMPDI G---D
SDPSV-----I YVRPGV-EVDLDSVI QETI RLTAASAKSSCEACEKS-----TVVWQY
GGNQKK---RYSQR-----WSKLLDLKKTLDKAAN-----
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>DUF177B_Amborella_trichopoda

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-----MVLSI QKHVGFYYSI DGRI TTCFTRKCSNCLSPYCKEI DTHFNWVWLPSSKENHSLQLPEI G---G
DDPSV-----I YI NPRSPADLDSLVDKTI RLSTS--GVCSESCERS-----PQRWEC
GDPKEG---YDRR-----WSKLLQI KVTA-----
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>DUF177B_Sorghum_bicolor

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-----MARACNRALRLLPNSIA
-----TQLASSRSGA
RFRSLAVHAQLS-----TEDDAYSTEPLKKAQVTQSLRRTRRRGTGGARQ-----
-----SLVSVGTSCTGGDQWSSD-----I ELTLRQLHLDDLIED-----
-----GORDADVLVHLLVQOHTQFGMSI KGRVLTFRKI CDSCSLPYCTNI DERFNLTVLSSTRRQDS-GLPDLG---D
TDPSV-----I YVRPGD-EVDLDSVI QETVRLTASAKSSCSETCEKS-----TVVWQY
GGSQKK---KISSQR-----WSKLLDLKKTLDKAPK-----
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>DUF177B_Zea_mays

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-----MARACNHARLLPNSIA
-----TQLACSGGST
RCRNLVHAQLS-----TQDDAYTTEPPLKKAQVTQSLRRTRRRAPGGARQ-----
-----SLI SVGTSCGGDQWSSD-----I ALTLRQLRLDDLVED-----
-----GORDADVLVHLLVQOHTQFGMSI KGRVLTFRKI CDSCSLPYCTNI DEHFNLTVLSSTRRQDS-GLPDLG---D
TDPSV-----I YVRPGD-EVDLDSVI QETVRLTASTKSSCSETCEKS-----TVVWQY
GGSQKK---KTSSQR-----WSKLLDLKKTLDKAPK-----
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>DUF177B_Arabidopsis_thaliana

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-----MDVRCLI SPNLLNSKI K
-----VSGNTHH---L
PFSSLSKKHQAS-----SPI QAAI NGGGSSKTVKRLI-----
-----TLPSEGKWNGN--WKTQ-----YDVSLRDLQLQDLVED-----
-----GPPNSRVSDLSVQRHASMGLSVDGRI MTSI ARKCSI CSSLYPRLI DTSFTVWI LPSSRENRASTLPEI G---G
DDPSV-----I YVRPGY-EANLDSLVDQTI RLTTYAKDI CSDSCEKSE-----PTLHYV
GQTNTA---SVDKR-----WSRLELELKKK-----
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