

Accessory Publication

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ScFRDL1 1 -----MEEG--AAASMTVREK--RVAVGVPADA-ATAAANGHGPEEK-----AAEELP
HvAACT1 1 -----MEEG--AAASMTGDKKWVAVVDVPADADAATAANGHGPEEK-----AAEDLP
OsFRDL1 1 MAGLKRMEEVTAATAAAVAASSTA EKRAAAVVPDAALTMNGAGAEKTAATAAAAPEDLP
ScFRDL2 1 -----
OsFRDL2 1 -----MNGESLIDRS-----SSALDAA

ScFRDL1 44 APSALSGWPRRTGMYL FVMNIRSVFKLDELGSEVLR IAVPASLALAADPLASLVDTAFIG
HvAACT1 47 A--ALSGCPRRTGLYLFVMNIRSVFKLDELGSEVLR IAVPASLALAADPLASLVDTAFIG
OsFRDL1 61 APAALSGWPRRVGLYLFVMNIRSVFKLDELGSEVLR IAVPASLALAADPLASLVDTAFIG
ScFRDL2 1 -----MHLIGVVFHGGATLTFRDDELGREIMGIAVPCALALMADPLASLVDTAFIG
OsFRDL2 17 MNDAYECHRHHHPLSVFLRDAFLAEFRWDELGREIMGIAVPCALALMADPLASLVDTAFIG

ScFRDL1 104 RLGSVETAAVGVSI AIFNQVSKVCIYPLVSVTTSFVAEEDAIISKYIEENNSKDLKAAH
HvAACT1 105 RLGSVETAAVGVSI AIFNQVSKVCIYPLVSVTTSFVAEEDAIISKYIEENNSQDLEKASH
OsFRDL1 121 RLGSVETAAVGVSI AIFNQVSKVCIYPLVSVTTSFVAEEDAIISKYIEENNSQDLEKASP
ScFRDL2 51 HIGVEVETAAVGVSI VFNQVTRIAVTPLVSVTTSFVAEEDATSSDRNKVEISGDNEHNVS
OsFRDL2 77 HIGPVEVETAAVGVSI AIFNQVSRIAIIPLVSVTTSFVAEEDATSSDREKYEINGENENFVNS

ScFRDL1 164 VHSDACNVFASGGDTPVCANSCIPTECADP SNQGCKRKYI PSVSSALIVGSFLGLVQAVF
HvAACT1 165 VHSDACNVFASGGDTPVCANSCIPTECTDLSNQGCKRKYI PSVTSALIVGSFLGLVQAVF
OsFRDL1 181 VDSSETNMLEVSGGPKVFCVNSCIPTECTNPSDQGCKRKYI PSVTSALIVGSFLGLVQAVF
ScFRDL2 111 ---EMDELITHEENNATSKKSSFETTSSE--TNTETHRKKI PSVSTALLLGGVGLGLVETLL
OsFRDL2 137 D--SEMEELVSHHEAASAPSKSSFETTSSE--VKIEHKKRNI PSVSTALLLGGVGLGLVQALL

ScFRDL1 224 LI FSAKVVV LGIMGVK RDS PMLE PAVRYLTIRSLGAPAVLLSLAMQGVFRGFKDTKTPLYA
HvAACT1 225 LI FSAKVVV LGIMGVK RDS PMLE PAVRYLTIRSLGAPAVLLSLAMQGVFRGFKDTKTPLYA
OsFRDL1 241 LV FSAKVVV LGIMGVK RDS PMLE PAVRYLTIRSLGAPAVLLSLAMQGVFRGFKDTKTPLYA
ScFRDL2 167 LV FCAKPTLDEMGVKADTGMKPAICYLVL RSLGAPAVLLSLAMQGVFRGFKDTKTPLYA
OsFRDL2 195 L I A P L L C M G V I Q S A M I P A L K Y I V V R S L G A P A V L L S L A M Q G V F R G F K D T K T P L Y A

ScFRDL1 284 TVVGDATNII LDPI LMFVCHMGV TGA AVAHVISQY LITMI L L C R L V Q Q V D V I P P S L K S L K
HvAACT1 285 TVVGDATNII LDPI LMFVCHMGV TGA AVAHVISQY LITMI L L C R L V Q Q V D V I P P S L K S L K
OsFRDL1 301 TVVGDATNII LDPI LMFVCHMGV TGA AVAHVISQY LITMI L L C R L V Q Q V D V I P P S L K S L K
ScFRDL2 227 TVAGDANII LDPI LMFV FQYGV SGA AVAHVISQY E I A A I L L C R L S I Q V E L I P E N L K H L P
OsFRDL2 255 TVAGDANII LDPI LMFV FQYGV SGA AVAHVISQY E I A S I L L W R L R L H V D L L P P S F R H M Q

ScFRDL1 344 FGRFLGCGFLLLARVVAVTFCVTLASSLAARDGPTIMAAFQICCLWLATSLLADGLAVA
HvAACT1 345 FGRFLGCGFLLLARVVAVTFCVTLASSLAARDGPTIMAAFQICCLWLATSLLADGLAVA
OsFRDL1 361 FGRFLGCGFLLLARVVAVTFCVTLASSLAARDGPTIMAAFQICCLWLATSLLADGLAVA
ScFRDL2 287 TGRFLKNGSLLLARVIAATCCVTLASMAARLGSVEMAAFQICLQIWLASSLLADGLAFA
OsFRDL2 315 FSRFLKNGFLLLARVIAATCCVTLASMAARLGSVEMAAFQICLQIWLASSLLADGLAFA

ScFRDL1 404 GQAVLASAFKNDTKKVTAAATSRVLQLSIVLGMGLTVVVLGEMKFGAGVFTKDAAVIDVI
HvAACT1 405 GQAVLASAFKNDKHKVTAATSRVLQLSIVLGMGLTVVVLGEMKFGAGVETRDADVINVI
OsFRDL1 421 GQAVLASAFKNDKGVVVAATSRVLQLSIVLGMGLTVVVLGEMKFGAGIFTRDIDVIDVI
ScFRDL2 347 GQAVLASAFKNDKHSKAKATASRVLQLSIVLGMGLTVVVLGEMKFGAGVFTKDAAVIDVI
OsFRDL2 375 GQAVLASAFKNDKHSKAAATASRI LQ L G L V L G L L L S I F L G L G L R L C S R L F T D D Q V L H H I

ScFRDL1 464 HNGIPFVAGTQTINALAFVFDGINFGA QDYTYSAYSMVGVA S I S I P C L V Y L S A H K G F I G I
HvAACT1 465 HNGIPFVAGTQTINALAFVFDGINFGA QDYTYSAYSMVGVA S I S I P C L V Y L S A H K G F I G I
OsFRDL1 481 HNGIPFVAGTQTINSLAFVFDGINFGASDYTYSAYSMVGVA S I S I P C L V Y L S A H N G F I G I
ScFRDL2 407 YVATPFVALTQEFINALAFVFDGVNYGASDEAYAAYSLILVAVTSTACTVTLANYCGFIGI
OsFRDL2 435 YLGIPEVSLTQEFINALAFVFDGINYGASDEAYAAYSMLLVAIVSITIFLVTLASYNQFVGI

ScFRDL1 524 WVALTIYMSLRTIASTWRMGAARGPWAFLRK-----
HvAACT1 525 WVALTIYMSLRTVASTWRMGAARGPWVFLRK-----
OsFRDL1 541 WIALTIYMSLRTIASTWRMGAARGPWVFLRK-----
ScFRDL2 467 WIALSIYMSLRMEAGLWRITCTARGPWAFLR-----
OsFRDL2 495 WIALTVYMSLRMLAGFLRITCTARGPWTFYAAQRMHSHEVVGLC

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Fig. S1. Alignment of the amino acid sequence of ScFRDL1, ScFRDL2, HvAACT1 and OsFRDL1 and OsFRDL2.