

YEDZ_ECOLI	71	PLLIRTRRLGLWCFAWATLHLTSLALLELGV	..NNLALLGKELITRPLYLTLGIISWVLLALAFSTSQAMQRK	.LG.KHWQQLH.NFVYLVAI.LAPIHYL	166	
Y986_PSESM	66	PGWIVRRQLGLWCFAVYVLMYALFILG	..LDWGQLVGLVKRPYIIVCALAFGLGLALAVTSNRSYQRR	.LG.SRWKKLH.RLVYVILG.LGLLHFL	160	
YAH5_PSEPK	66	SGWIVRRQLGLWVFAYIVLHILCYLFFILG	..LDWGQVLAVELKRPYIIVCALGFLGLLVAVTSNRSYQRR	.LG.ARWKKLH.RLVYAVLG.LGLLHFL	160	
YAJ1_PSEMU	66	PGWIAVRRLGLWCFTYVLLHLSAYVFFILG	..LDWGQVLGIELSKRPYIIVCMGLGFVCLFLAITSNRFAMRK	.LG.SRWKKLH.RLVYVILG.LGLLHFL	160	
Y538_PASAE	68	PQLQVLRRLGLWAWFYVVLVYAYLAELG	..YDFSLFQBELVNRGYLLICAIAPLIRLMLALSSSYLKLK	.MG.KRWFKLH.QLGYVALL.LGAIHYV	162	
YG46_XANAC	77	AVVIRFRMLGLYAFYATVHLAAYLTLDR	..GFWOTIFEIILKRPYITVCPAAWLLLMLPLAITSQGWMMR	.LK.RNWGRHL.MLIYPIGL.LAVLHFV	171	
Y1G5_BORBR	74	PALVRLRRMCLGFAFFYGSLEFLAWVWDRG	..LDPVSMLOQVGERPFIIVCPAAFVLMALAAATSTQWAMRK	.LG.KRWQVHL.RYVAIYL.LAILHFV	168	
YT80_RALSO	74	NWLIRIRRMGLGYTFYGTLEFLIWLVLVDRG	..LDPASMKVDIAKRPYITVCPAAFVLMPLAATSTNAMVRR	.LGGRRWQVHL.RLVYVTGV.LGILHYV	169	
YR47_CAUCR	78	PRLVRFRRTVGLFAPAYVALHLLAYVGLD	..FPDWNQLWKDILKRPYITLGMGLFMVLIPLAVTSNNGWIR	.MGRAAWSRHL.RLVYVLPV.LGVAHYV	173	
Y304_BRUME	78	ITLLRYRRALGLLAFYALMHEFTTMYVLDQG	..LNLSAIIITDIRRPFITIGMISLALLVPLAITSNWSYR	.LG.RRWSSHL.KLIVYIAI.GSAVHYL	172	
YD20_RHIME	74	VNWLRYRRALGLLAFYVMMHFLTVMVLDQT	..LLLPAIVDAIARRPFITIGMAALVLLIPLAVTSNWSYR	.LG.QRWNKHL.RLVYVIAA.AGALHFA	168	
YJ82_AGRT5	77	VNLIAYRRALGLIAFYVLAHFTVYVLDVRG	..LLGSIVAGDILKRPYIMLGMAGLIIILPLAITSNRSYR	.LG.SRWNTHL.KLVYLVLI.VGVLFHV	171	
YP37_DEIRA	71	TWAARIRKALGLLAFYAVLHFGIYLRGQD	..FSLGRIWEDVTERPFITSCFAALLLLLPLVLTSGKGSVRR	.LGFARWTLH.RLVYLAIA.LGALHYV	165	
Q7NFG8_glovi	82	PGLQERRYLGLLTFAPSVLHTWSQIEH	..VLGSSLDGMFFLPDRMQFVGLFCIFALLAMPLAATSTDAWTR	.LK.KAWKQLH.QGVFPAF.LIVLTLT	177	
Q8YN59_Anasp	273	ASPLNRYRAALGVGAFVLSVVTHTTHMIQHS	..LDWNFAAFFLPPQFQIGMAACAVALIMLTPAFTSWESWQKS	.LG.YWRQRIH.LLISVPALL.LSAIHAV	368	
Q97Lk5_Cloac	91	KKLVAIRAQMAIMASIFIPFHVCIYLYVVKL	..YTFPVEIVDKGSIELFTAAYILACIIAIFIMMPLFIITSK	.L.KVRRKMNQVKKWKLQ.RWAYLFLV.LVGVHL	190	
Y572_TREPA	87	QRVMGLRAELAITAAILTGHVNIH	..GRDYLVRLCGSTGDLSTGVLVAGAVSMVLLMSLITSFSK	.VFLRRMGAKTKWRVQ.RLAYFYGL.LTVVHLS	183	
STEA_HUMAN	155	DKWMLTRKQGLLSFFFAVHLAIYSLSYPMRRSRYKLLN	..WAYQQVQNKEDAWIEHDVWRMIEIVSGLIVGLAALLAVTSIP	.SVSDSLTREFHFYQSKLGIYSVL.LGTIHAL	270	
Q8NFT2_STEAP2_Homsa	296	ETWLQCRKQGLLSFFFAVHVAYSLLCPMRRSRYKLLN	..MAYQQVHANIENSWNEEVEWRMIEIVSGLIMSGLLSLAVTSIP	.SVSNALNWRREFSFTQSLTGYVALL.ISTPHAL	411	
Q865F6_TSAP6_Homsa	296	DHWLQHRKQIGLSFFFAALHVALSFCPLPRAHRYDLVN	..LAVKQVLANKSHLWEEVEVWRMIEIVSGLVLALETLSLAVTSIP	.SVSNALNWRREFSFTQSLTGYVALL.LSTLTLT	411	
Q91W31_TIARP_Musmu	284	DHWMLCRKQGLVLAFLAFLEIVYITLVPIRYYVWRLLRN	..ATIIQALTNKSDPFTISYAWINDSYLALCIGLGFYLLGLTSLP	.SVSNMNNWRREFSFTQSKLGYLTLV.LCTAHTL	399	
Q6PAY4_Xenla	283	DTWMLCRKQGLVLAFLAFLEIVYITLVPIRYYVWRVNSN	..YIITQIKNTNYFELNYSYAWLSDSYVALCIGLGFYLLGLTSLP	.SVSNMNNWRREFSFTQSKLGYLTLV.LCTAHTL	398	
Q6P7H1_Xenla	284	DQWMLCRKQGLIALSVALLEIVYITLVPIRYYVRYRINS	..NIITQIKLNTRTFDNTLAWRTDAYIALCIGLGFYVLLGLTSLP	.SVSNMNNWRREFSFTQSKLGYLTLV.LCTGHAL	399	
Q12209_L2114_Sacce	146	LALLPLHKWISRIVLESILHTWYFL	..YYMYINDTLVYKMRKLPNIYGVIALGLFLLIATSVR	.YARR.WSYRVFYVH.YVSTWILVFLVHAR	238	
YGR0_YEAST	130	TDFIPFHKWFSRITIVIGLLGFIIFIKW	..AIDDNVFAFFLQKLIKTFNFACPIIISLVLFLLCSIG	.PMRR.YSRYRIFYVH.HLVNVAFILLTPIHSR	225	
C24B_HUMAN	94	DRNLTFFHKMVAWMIALHSAITIAHLNFVVEVCYRNVNNSDPYSVALSELGRQNESYLNFAARKIKNPEGLLYLAVTLLAGIT	..VUITLCLILITISSTK.TIRR.SYFVVFYWH	.HLFVFFIY.GLAIHGA	223	
NOX1_HUMAN	95	DHNLTFHKLVAYMICLHTAIIIAHLNFVDCYSRQATDGLSASILSLGSHDEK.KGGSWLNPIQRNTEITVEYVFTSIAGLT	..GVIMTIALILMVTSAE.FIRR.SYFVVFYWH	.HLFIFIPYL.GLGIHGI	223	
Q8JON4_noxA_Emeni	91	DENIWFHRQVAYATVLTGLVAAHVNFYFN	..IERKQLRPETALQIHYAQPAVGT	.HVMFLFCMMLYTAHH.RIRQ.QSFETFYWH	.HLFIFPFL.GLYTHAT	190
Q9XY33_Dicdi	95	DKNIVFHKLIWVICFATFGLGVMAHFNFRYQDITP	..QEQYKRILIDYPNLPIKYA.FATLAGWT	.HVCVIMVMLMYTSAVE.SIRR.PMFEFVYWH	.HLFVFFVGL.LLVVHGL	205
Q7Z7G3_NOX4_Homsa	99	DKSRTFFHITGVITICIFSGVVAHLLNALNFSVNSYSED	..FVELNAARYRDEBDRKLLFTVPGMT	.GVMNVVLPMLTASTY.AIRV.SNYDIFYWH	.NLFFVFFYM.LLTLHVS	209
Q8MX00_Dicdi	659	DKYMTFHKLIGYTLIIASFLTIGVGMVAVATGKDPN	..IFYDLPALPHFKRPTVWEMIFNSLPGV	.CPIMIISFLIIMALSLK.IIRK.SNFHFLFYSH	.HLFIFIGYV.LLILHGT	770
O61213_Caeel	1067	D5AIAFHKIVAFAPFAWTLTGVCHVSYVWFTSQBGLAC	..LQFAEAFSGSNFLPISYVWFTSITGLT	.GIALVAVMCIYVFLSK.CPIK.RAYHAFRLTL	.LNNIAFYA.LTLHGL	1181
Q9VQH2_Drome	1047	DSHIQFHKIAACTALFFSVLHTVGHIVNFYHVSTQSHENLRC	..LTREHVFPASDYKDPITFWLFOVTVGT	.GVMLFIIMCIIFFVAHP.TIRK.KAYNFFWNM	.TLYIGLYL.LSLHGL	1161
Q9NRD9_DUOX1_Homsa	1124	DAAVDFHRLIATAIVLTVLHSGHVHNVVYLSISPLSVLSC	..LFPGLFHDDGSELQPKYVWVFFQVTPVGLT	.GVVLLLLLAIMYVFAH.HFRR.RSFRGFWLTH	.HLYLLYV.LLIIHGS	1240
Q9UHf9_Homsa	783	DAAVDFHRWIAAAVVLALHSGAHVNVYIFSVSPLSLAC	..IFPNVFNVDGSKLQPKFYWVFFQVTPVGMT	.GVVLLLVLAIMYVFAH.HFRR.RSFRGFWLTH	.HLYLLYA.LLIIHGS	899
Q9V7N2_Drome	339	DHNIVYHLKLTGITVVSLSLHTVHMLNFNLSIIVNDPNI	..NAGHYTIGEWLLTDRPGLFGLIPGCANPT	.GVALLAIVVMVFCSSQP.FVRRKSGHFVFFYWH	.LFLVFFVI.LCLFHGP	453
Q96PH1_Homsa	308	DQNIQFHQLMGVYVLSLHTVHMLNFVFLQAQA	..EASPQFQWELLTTRPGIGV.HVGSASPT	.GVALLLLLLWVCCSSQ.CIRRSKHGFVFFYWH	.LSYLVWL.LLHFGP	417
P92950_FRO1_Arath	203	ESSIKYHIWGLHVMIFTSBGLCYFIYW	..ISKNLQVSKMLEDWRTAVSNLAGEIALVAGLMMWATTYP	.KIRR.RLFEVFFYSH.YLYIVFML.FFVHVVG	299	
P92949_FRO2_Arath	213	ESSIKYHIWGLHVMVMAFTVHGLCYFIYW	..ASMHEISQIMWDTKGVSNLAGEIALVAGLMMWATTYP	.KIRR.RFFEVFFYTH.YLYIVFML.FFVHVVG	308	
FRE2_YEAST	310	TSFIMFHKWLRGMRFLDAVHAGAYT	..SYTVANKTWTASKNRLYQF	.GVAALCLAGTVMFFSFA.HFRR.YFYEAFFLH	.IVLGMFFYACHEVV	402
FRE3_YEAST	310	TSFIMFHKWLRGMRFLDAVHAGAYT	..SYSVFFYKDWAAKETYVQF	.GVAALCIYVGMVFFSFA.MFRK.FFYEAFFLH	.IVLGMFFYTCHEVV	402
FRE4_YEAST	303	TSFIVFHKWLRGMRFLDAIHAAGFT	..NYLYLYKKNVTVRLRYWKF	.GIATTLACGLMIFFSIA.AFRY.HYEFYFMALH	.IVFAALFLYTCHEVHT	395
FRE5_YEAST	304	TAFITVHKWLRGMRFLDCTIHAIGYT	..YHAYIENYKVKVYSDLWTS	.GRHAMIVGLVLFVFSFG.FFRR.HYEFYFVITH	.IILAGFFHACWKHKV	396
FRE6_YEAST	317	NSFISFHKWLRIMVNLATIHSLSYS	..LFAIINHAFKISNKQLYKFK	.CIASITVLCVLLVLSLGF.IVRK.RHYEFFLYTH	.IILALLFFYCCQWVKV	409
FRE1_YEAST	288	STFNFYHKWSAYVCFMLAVHVSIVMTASGWRK	..GVFQSLVRRKIFYFRW	.GIVATILMSIIFQSEK.VFRN.RGYEIFLLH	.KAMNIMFIAMYHCH	380
FREL_CANAL	269	ATFIMYHRWISRVDVLLIIVHAITFSVS	..DKATGKYKNRMKRDPMI	.GTVSTICGGFILQAML.FFRK.KCYEAVFLH	.IVLVVFFVGGVYHLE	361
FRP1_SCHPO	151	EKMNYVHRRLSQYAIMIGALHGPAYI	..GLAAQKRALLTARVTI	.CYVILGLMVMIVSSSLP.FFRR.RFYEAVFFVLH	.HMSCGFLITIWHLR	241
FRE7_YEAST	191	EKINIYHQWASILCLFFSWVHVIPFLRQARH	..EGGVERMHQWRKASDMWRS	.GVPPILFNLMLWSSSLP.IARR.HFYEIFLQH	.GILAVGVYISLFFHYV	287
Q8YTT0_Anasp	80	DLIQFHRYTSIVAFLEFLAHPRIIFLFINN	..PETLQNLNFQAPWRK	..AAVIATLALAIIVTSIW.RKQLNIGYENWRIAH	.GILAVIVSFGLGHV	174
YE62_ARCFU	29	SYIVKAHRLFGYISVGFLLFPLLEVLPR	..QFEGSIQPFDAFWKIITDNSAIL	.GIAGAVMLTLAVTSVL.RKRLFKNYRKRWTFH	.GILAVVLTIVVGYEVL	130

TM III

TM IV

TM V