

Figure S1. Alignment of Rai1/Dxo1/DXO family members from the Saccharomycotina (budding yeasts), together with *Schizosaccharomyces pombe* and human. Motifs from figure 1B are highlighted in the consensus line. Proteins encoded by duplicated genes are named Rai1 or Dxo1 based on their similarity to these motifs.

SaccerDxo1	1	MST-----EQDAVLGLAKDLEGINLLTVPNLERGHQSKLCKEKTTSDDSSSRKPSQQRDNYRKRPRKLCITPYTSFLHTG-----MHNFLTKPPRDI
SacmikDxo1	1	MPT-----EHDVAVRLTKELDGINLHSAFDIVREHQKKSFNWKTNSVSLGNMSLQQSENHINGHPKFTRVSYTSFSSHG-----MHKFFPAKPPRDI
SackudDxo1	1	MST-----EDDPIARLTKNLESTNLNIVPDLVKGHQKRSSEGRSISITSSVKPPSPQKDDYWNRCRFRKCVPYTSFVHTS-----IHDLSRKPPGDI
SacuvaDxo1	1	MSP-----EQDGVVKLAKDLEGINLRDVPNPNVNEHRKKSRRKIIPISLKRPPSSQKNDYLEEISEFTRVYSSFLHTS-----IRNFPTKPPDI
CanglaDxo1	1	-----MEEVVNQLEALSLSNDKRRRVKQRKGGK-----KKKHGNSRRADDHTVIR-GNKQRLK-----TSHH--KNMPQF
NaucasDxo1	1	-----MKKTQQLMPL-----HTTVQSQQKAPITRVPFGEFSSHSS-----ISLFPCTC-QPF
NaudaiDxo1	1	MTT-----S-----TKPYDFTNLSRELNAVK-----EETNASKEVITAPPITTIIPFKQFKHCS-----ISTYPKTP-SSF
TetblaDxo1	1	MTN-----LEDNFSKMSLDGN-----DKNSHNIHKLPVCSHS-----LPGKKYQGGSI RFNFSVFKPS-----KTHF-----SDL
TetphaDxo1	1	MENANEGKNNTSLPEDNACILVEGLEKLSIDGTTNVSRR-----NKAKKGGKDKKSRGKYSDDIARIIPFKHFSYSN-----AHIGKISQ--PNI
VanpolDxo1	1	-----MDEHINDV-----QTQLSNLKI-GEDNPSR--KVKQNKSRPKKNVINIIPFHRFVHSN-----ARSPQKT-KDL
ZygrouDxo1	1	-----MESHKCSRNRACLPSVFPNQFQHS-----AFRFPSEP-RNL
TordelDxo1	1	MSK-----TSDSST--ASSLEVHLLGNKLNLSL-----GLQDSPHGPKQR-RKQSQKRTVCIPFSKFEHSD-----LDYFPDDT-ADF
KlulacDxo1	1	MTTVSCDK-----DENKVDQLGESLSQLRI-----STRKNNKPSQKKGSLVLSCKKFPVHS-----VNVVVDKT-PKL
LackluDxo1	1	MTI-----PTDE--LTADISKLSL-----QH-GSQTANCKGFVHSN-----VSHFPSVP-CKF
LaccheDxola	1	-----MQKLFKLSL-----EDLPDEACVSCRGFERAS-----ISHFPAEP-LHF
LaccheDxolb	1	-----MP--P-----KTKA--KVL
Hanosmdxo1	1	MS-----SVDLLLLDVSKLSLTEDGHAK-----KELHATESLLASFQYDPEK-----SRTYLESQ-PVL
CanalbDxo1	1	-----MERIPLSVFEKFNQQLSDVDPEDRFISKLSLQSP-EIF
CandubDxo1	1	-----MDRIPLSVFEKLNQDLCSVDPEDRFVSKCLRSQ-ETF
CanparDxo1	1	-----MLDKLRLSLFENIVNGS--EIVEDEVLNELFNV--Y
Lypsta	1	-----MAGRPHFQS-----TPWNTGTPQ--VSSHGQRQAPALSPLI--S-----SARIRG-PAM
Yarlip	1	-----MSSFS-----TTERLA-AKL
Ogapol	1	-----MEFSKVYPL-----QSRADQ-ASV
Wiccif	1	-----MSSSKLPL-----NSRAAT-TAL
Cybjad	1	-----MSGVKLPL-----NSRADT-TAL
Kompha	1	-----MSKEKILPL-----AARSK-AML
Metbis	1	-----MNHTLPL-----STRAET-TAL
Canlus	1	-----MLKLLPL-----SARSDS-TAL
Canaur	1	-----MIKTFKL-----NSRSET-SSL
SaccerRai1	1	-----MGVSANLHV-----KQRGST-TAL
SacmicRai1	1	-----MGVSANLHV-----KQRGST-TAL
SackudRai1	1	-----MGISANLFI-----KQRGST-TAL
SacuvaRai1	1	-----MGVSANLHV-----KQRGST-TAL
CanglaRai1	1	-----MGISANLHV-----NQGTT-TAL
NaucasRai1	1	-----MAITANLHV-----NQGTT-TSL
NaudaiRai1	1	-----MAITANLHV-----NQGTT-TSL
TetblaRai1	1	-----MKQTANLHV-----KQRSQT-TTL
TetphaRai1	1	-----MAITSNLHV-----KETGST-ITL
VanpolRai1	1	-----MAVTSNLHV-----KQKGTT-TSL
ZygrouRai1	1	-----MVVTSNLHV-----KQKGTT-TAL
TordelRai1	1	-----MGKTYNLHV-----KQKGTT-TAL
KlulacRai1	1	-----MVLSSSLHV-----QKRSTT-TAL
ErecymRai1	1	-----MPLNANLFI-----KKRSGT-TAL
LackluRai1	1	-----MGLSANLHV-----KKKGST-TAL
LaccheRai1	1	-----MGLSADLHV-----QKRSAA-SSL
HanosmRai1	1	-----MMIKPLFI-----RERSNV-TAL
CanalbRai1	1	-----MAKSLPL-----NSRSKT-TAL
CandubRai1	1	-----MEKSLPL-----NSRSKT-TAL
CanparRai1	1	-----MSKTFPI-----TSRAKT-TAL
schpomRai1	1	-----MLREFS-FY--D-----VPPAHV-PPV
homsapDxo1	1	-----MDPRGT-----KRGAEKTE--VAEPRNKLPRPAPSLPTDPA-----LYSGPFPFY
consensus	1	-----i i l f l-----k t s l

SaccerdX01 88 FHES--KEVALF-----TNGR-AYTIL--RK-----DILPNLKESIAELVE--SSL--LEAKRRK-----VPYLGHDLFANIDQFVPMT---ISE
Saccm1Dx01 88 FHES--KEVALF-----TNGQ-AYTIV--RK-----DILPNLKGDIAELCE--RSL--LDARERK-----LPYLGHDLFANIGQFVPMT---ISE
SackudDx01 88 PQDS--KEVALF-----TNYQ-AYTAA--RK-----DLIPSLRKGITELVE--SSL--LEARRRK-----VPYLGHDLFANIDQFVPMT---ISE
SacuvaDx01 88 EYES--KEVALF-----TDNQ-LYVAA--RK-----DVLPNLKEDIHSLVE--SPL--LEARKLK-----TLYLGLDLFANIDELVPMT---ISE
CanglaDx01 63 YDSA--KTLGIF-----HDHK-LYEMN--RM-----DLVFPQLKDFIAHIAK--STP--AEKTLQV-----RPFGLSILYENHDKYSPMT---AKE
NaudasDx01 47 YESS--NQVALY-----HNHK-LYPAS--QY-----DIPIHLKNDAIQLPK--KSA--SEARTLK-----RSYLSGDDLYGDFETFPVPM---AKD
NaudaiDx01 60 FETS--KDVALY-----HNKQ-LYSSD--DT-----NLIPQLEPAIAKLANPSCSL--NEARDLK-----LPYLSGDDLYGDFESFIPMD---PDE
TetblaDx01 60 YRTS--KEVATY-----HLGN-LNINT--DPTIEHTKGVCLKDDICQIAG--KSL--LDSKKYK-----AKYIGADLFKDYKRYHAME---KEP
TetphaDx01 63 FQEA--KGVALY-----YDKR-ITKI'FNNEALINESNPFFLTKDINLSE--ISL--LDSKKFK-----LPYMGNYLYDEIEKFGFMD---STL
VanpolDx01 62 FLES--KTVAFF-----QKQD-LFINV--ED-----AALPLLKDIANISG--KSV--LNSKKYK-----LPYLSGDDLYASTDYKGLPLP---EDV
ZygrouDx01 37 PTKY--KEASYI-----YGGQ-LHDSI--SD-----SIG-----LKSFGNKLSHDRSCSNK-----RDFLSGDDLYQGWEDFLPLS---PEI
TordelDx01 71 FECC--EEVATY-----QNGY-LFMKDDSKK-----PLYPCLQMFALIAE-----NRGPKNK-----LPYIGCDLYQGHERYKPLP---SSE
KlulacDx01 63 LTDC--KEVHNC-----S-----YIINDATLLWNEASRKRPLRPEVCTYIK--DSK--WENKAVK-----DSFIFGLTKGYDDYVPLD---RNV
LackluDx01 46 FQES--REIGTF-----TRMV-----SSGKYLFDKDLGLRPLKDDICEYIH--NPA--KNASKIK-----TOYLYGDDLLNGFEDYIPLS---EDE
LactheDx01a 60 FDEV--KEIGTM-----THWI-----DSKDFELGRKQSAHPLKDDGLFTI--TK-----KLAKT-----NSYVGHDLLEHYDDFQPLT---PNQ
LactheDx01b 11 RTSPHVKATFRY-----EENN-----ASGNACLKAKHCAEYFDLLTYNDL--HRSPDS--YLEGNDQRPLPMCKPESKDFGVRV---IPVS
HanomsDx01 55 ---C--KEMELMGSVLKIRKKDKKCHDYDQFHLEKGNY-----EGLAVINDLQESQ--SDRM--KLSKKCL-----SRYPNSLNGFQNYVPIIS---PYE
CanalbDx01 38 STPC--EECTYF-----TKSN-----NNILKFDFTTGLNTVLSVYQSQSKKRQKKTNASSKGR-----PKIIGSDDLYGDFESFKPES---LKD
CandubDx01 38 STPC--KEMTYF-----TKG-----NNILEFHDTTGLMKVLIISFTQPAKRRKQKPKNG--SRNQ-----PKIIGSDDLYGDFESFKPES---LKD
CanparDx01 34 NCDP--EELCVY-----TKD-----ESTLKFQDITSGLEHVKIPFGSKGKTKK-----RVSDKG-----PVIIGTCLTEGDFKFEQPN---LMD
Lypsta 46 RQ-P--REVTYSF-----SYDN--N-----RSLHFD-----SSLSYFLLQDDVTSAGGDLDSAGYVFKRRD--DTI-
Yarlip 15 KK-P--KEVYSY-----SIT--D-----GKVTMDQ-----SQLKYYLPEETILKA--IDLTKGIENWTQP---NEH
Ogapol 19 KQ-P--KELISY-----SRDI--E-----GKYRVD-----SQLSYFLPDSQLNVVGGDL--AGFKDFHAN---GED
Wiccif 19 KQ-P--KEIASF-----SRTF--D-----GEVYND-----SSLGYYFLPDSIDETN--IDLGAGFKKFKKFD--EAR-
Cybjad 19 RQ-P--KELYCF-----SRTF--D-----GEVYNGD-----VCLSYFLPDSVDTN--IDLGAGFKKFKKMD--DDK-
Kompha 19 RQ-P--KQVAYF-----SRDL--N-----YKTHPDR-----SNLSYFLPDDGIDNS--IDLVSQSKHFLG--DSVE
Metbis 17 KQ-P--KELFSY-----SRNA--D-----GGQTDDEKALQGLNYFYFDAYVDKN--IDLQAGLSFKKIF--DAQN
Canlus 17 KQ-P--KELFSY-----SRDE--S-----GEWNIDEHVSKDEALSYYFSDSYVQD--MDLQAGFKSFRKIP--EEQN
Canaur 17 KL-P--KEVFSY-----SRDL--D-----GEWHTDDAKAKEALSYYFSDSYDRN--YNLGDFGFKKFKIP--EAEN
Saccerrail 19 KQ-P--KEIGFY-----SRTK--D-----EYLYSD-----DTNLNYYLPPDAELDRK--LDLSSGFKQFKDYK--DFED
Saccm1Rail 19 KQ-P--KEIGFY-----SRTK--D-----EYLYSD-----DTNLNYYLPPDAELDRK--LDLSSGFKQFKDYK--DFED
SackudRail 19 KQ-P--KEIGFY-----SRTK--D-----EYLYSD-----DTNLNYYLPPDAELDRK--LDLSSGFKQFKDYK--DFED
SacuvaRail 19 KQ-P--KEIGFY-----SRTK--D-----EYLYSD-----DTNLNYYLPPDAELDRK--LDLSSGFKQFKDYK--DFED
CanglaRail 19 KQ-P--KEICYI-----SRNQ--T-----EYLYSD-----DINLRYYYLPPQIEHG--IDLASGASKFDRVAK--DFED
NaudasRail 19 KQ-P--KQFGYQ-----SRTQ--E-----DEFLVGD-----DSRLSYYLPPNADLKK--LDLSSGFKKFKDCSK--NMKD
NaudaiRail 19 KQ-P--KEITCY-----SRTQ--E-----GEFLIND-----DSRLNYYLPPSDLDKY--LDLSSGFKKFKDCSK--QIED
TetblaRail 19 KQ-P--KEITCY-----SRTQ--E-----EYLYPKD-----DCNLHYYYFSDSYLDNN--YDLSGGAAKFKDFQK--NFKD
TetphaRail 19 KK-P--KEITYI-----SRTS--N-----DEFLVND-----DSNLNYYLPPDADLKG--LDLNGYKFKFDYYS--EFKD
VanpolRail 19 KQ-P--KEISYI-----SRTF--E-----DEFNVKD-----DSRLRYYYLPPDAELDMN--LDLGGIKKFKDYK--NFQD
ZygrouRail 19 KQ-P--KELTFY-----SRTD--D-----DNFLVED-----DVHLQYYLPPDAELDKR--LDLSSGFKKFKDTS--NFKD
TordelRail 19 KQ-P--KELSYI-----SRTT--N-----EEFLVGN-----DANLRYYYLPPDAELDNR--LDLSSGVAKMRDTRAK--EFKD
KlulacRail 19 KQ-P--KELGHI-----SRTQ--D-----NGFLVND-----DSRLAYYYLPPDLDLKK--LDLSSGFKKFKECNT--EEDF
ErecymRail 19 KQ-P--KELGYI-----SKTA--D-----NQFLVQD-----DSNLRYYYLPPDSCLENN--IDLGGIKKFKRDSMADSNVD
LackluRail 19 KQ-P--KELGYI-----SKTQ--E-----NSFLIDD-----DSKLNYYLPPDADLKN--LDLTTGIRKFKRCNGDPSFD
LactheRail 19 KQ-P--KELGYI-----SKTQ--E-----GQFLVND-----SSKLSYYLPPDTELENN--LDLCSGFKKFKCFCGNPVD
HanomsRail 18 KQ-P--KEIGRY-----SRKS--S-----YKENVENESXKQNCSTA--GYKSKYIND--DIFLNYYYLPPDNDLDRK--IDLSSGFKKFKNANSP--VD
CanalbRail 17 KQ-P--RELFSY-----ARDI--D-----GKVVYDD--P-ENLSYYLPPDSTIDTG--IDLGGYKFKKFKIP--DEQN
CandubRail 17 KQ-P--RELFSY-----ARDI--D-----GRVYDD--P-QDLSYYLPPDSTIDNG--IDLQAGYKFKKFKIP--EEQN
CanparRail 17 KQ-P--KELFTY-----TRDI--E-----GEYHYNANQS--HDHLPYYLPPDTKVTR--IDLQSGFRNFKKIS--EEAN
schpomRail 19 SE-P--LEIACY-----SLSR--D-----RELLDD-----SKLSYYLPPPLFSDLN--TGFFNRFHPFKSD--
homsapDxo 44 RR-P--SELGCF-----SLDA--Q-----RQYHGDA--RALRYSPPPTNGP--GNPDLRDGYPRYQPR--DEEV
consensus 111 kq p keva y sk d y l d l y y y e v d l d l g f k f h e

SaccarDx01 236 ----GIYSDPNMKKICYSGFENWVTEISKV-----ADLTGSKCPIFLSVESKLSSEEGLLIRCEMDA-FN--P-----
Sacm1Dx01 236 ----GIYSDPNMKKICYSGFENWVTEIGIKA-----ADLNGSKLPVFSVSEKLSSEEGLLIRCEMDA-FN--P-----
SackudDx01 236 ----GIYSDPNMKKICYSGFENHWVTEIDKA-----TDLNGPKHPIFVSVSEKLSSEIDGLLMRCEIDA-FN--P-----
SacuvaDx01 236 ----GIYSDPNKIKICHSGFENCLTENTKN-----SGSSASKCPVFSIVSEKLSSEIDGLLMRCEMDA-FN--P-----
CanglaDx01 209 ----GVNTDNPILKIKCFSGFALEDLITESANDE-----ERNPTFLVENEIA-NTRLMLRCEIDA-YN--P-----
NaucaDx01 205 ----GIYSKNIILKRIKYSGFALDMLTETSSELE-----K-----EGEKLTGGKAVFAVENKLLDDDDILLRCEIDA-FN--G-----
NaudaiDx01 209 ----GIYSKDGWVRIKYSGFALDMLTNTKNDHNDAD-N-----SDVTLVGGDKAVFAIENKLNDDISILLRCEMDA-YN--P-----
TetblaDx01 216 ----N-KQFYNSMRKIVNIGSFAFDLVLDYTSKSLT-PSLEEQKQKDPISITNNYFVSVNEDISPKLTLILRSEMDG-YN--P-----
TetphaDx01 239 ----NHKLQNSFSSKIVINSGFTEFLVLENFQF-----CHKPYFVISENRLTPKSTFIRSEMDA-YN--N-----
VanpolDx01 212 ----GLNSNPMTRKICYSGFALDVLVLEDAE-----NARPIFVSVSEKLTSETINLLRNELDG-YN--N-----
ZygroDx01 175 ----HTSRNTMTMKILHSGYALEDLTRGRV-----EDDFFAIIEAELDILSVLRCELDN-YN--E-----
TordelDx01 212 ----GLNSKNSMTRKICYSGFALDMLTTSHDE-----RMGPFYSIVEGKINERLSLLRCEMDA-YN--P-----
KlulacDx01 204 ----IHTRNSFNKIKCYTGFALDMLLIESPTGEGH-----ILEHELYSIVHGSLNDEIDLLIQAEEMDS-IN--T-----
LackluDx01 191 ----GIRSKDTRVRLKCYTGFALDMLVTKGKVD-----SPGMHTCFYSIVENKLTGVSILLQAEEMDS-YN--P-----
LactheDx01a 152 ----GIYSSESNIRIKCYTGFALDMLVETQPG-----AP--KSAFYSIVQGGKIKSNKLLFKAEEMDC-FN--P-----
LactheDx01b 188 ----FGSSKARDGWYSGYKFEDEMCRHVMPQNTQTWALPETNK-----DNNPLISLVLEPLKDDVSTVMAEYDL-----RLPGAQKPN-----GFVELKCFPLRLGN
HanomsDx01 213 ----GIHSSDHKLAMCYHGFALDMLSKDTQSD-----STGHYVYVKNCTLDNGKEILLQAEMLDMLN--P-----
CanalbDx01 185 ----E-----DPYNIQLVYTGKFEFVSEGR-----DSNFYTVQOH-CVDNIPIVYTAEDVCSIDKET-----
CandubDx01 182 ----DDNSSKYHKLMOYTGKFEKVLSEGIK-----DSNFYTVQOH-CVDNIPIVYTAEDVCSIDKET-----
CanparDx01 174 ----PDDYKLYQYNGFKFEVVDHAAD-----PKSSFHVSQTH-FAGKNMITYSAEIDCAISKMP-----
Lypsta 175 ----PQRSELMYSVYGFQFIATIPQWNECSSRQEVESRQGRPVSNVAQYCSVVTGLGD-VNMYIVGVEVDCVWDYKFPDKNDV-----NDPKLFD
Yarlip 140 ----PDEQMKHIIYSGYKFEVALLNEPWFKSSREDIESRFD-----IPNGDQFVSVVTRTIGD-NKILIGGEVDCVDFDPAK
Ogapol 147 KLT-----QSDLNKRIYSGYKFEKFIATLSKPAWQCSRKEIEQRNKLPVNNIEQYATVTKTSFGK-TGLVMGAEVDVCFDYPKEDA
Wiccif 146 ----PDDEHARLMYSGYKFEIATLPKLAQVSRATIDKNHKKIVSNAEQYCSIVKTIQIGK-QRIIIGGEVDCVWDYKPEDS
Cybjad 146 ----PSVEQRLMYSGYKFEVAVTPKPLNEVSRATIEKRKSKIVNNVEQYCSVVRTGIGK-TRIVLGEVDCVWDYKPEVDS
Kompha 146 ----KQGDTEFHKLQYSGYKFEKMATLPKWPBECTRIDEKRAKSKCNNEIEQYGAIVRTGISR-IKILIGGEVDCVWDYDEND
Metbis 153 RLGA--DAAKEHLRTRCEYGYKFEAVATLPRFWAHTPRAIEKRHKVVSNEYEQYISVVRTGVGR-VKTLAGEVDCVWDYLPDNA-----A-
Canlus 153 ALSP-----DRQYLDLCEYGYKFEALATLPKWAQCSRRIEKRKTKTSSVEYEQYISVVRTGIGK-IKTLAGEVDCVWDYVPTKE-----GD
Canaur 153 QLKA-SDEPKQYNYKCEYGYKFEALATLPKWAQCSRGLIEKRKTKTSSVEYEQYISVVRTGIGK-VKTLAGEVDCVWDYVPTKE-----KN
SaccarRail 156 ----GRNIQDLNVFTGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
Sacm1Rail 156 ----GNNIQDLNFTGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
SackudRail 156 ----GHSNDQDLNFTGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
SacuvaRail 156 ----VNNNQDLNFTGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
CanglaRail 156 NSR-----QAQTSRQIDTYTGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
NaucaRail 152 ----KENDHIDLGSYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
NaudaiRail 144 ----ETQDIDLNCYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
TetblaRail 148 ----VGAKNLNAVYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR-----T
TetphaRail 150 ----KVTPEYTYGYKFEALCTPELPLVSRKTLNKRPKKIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
VanpolRail 149 ----DGKIAPPVYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
ZygroRail 148 ----APGSPAQLAWYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
TordelRail 150 ----TTESRNAMVYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
KlulacRail 152 ----NRSLQARAYYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
ErecymRail 150 ----GTDSDIRNYYSYGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
LackluRail 150 ----TTDSIEHRSYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
LactheRail 150 ----NTSMSEYRSYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR
HanomsRail 188 GSRFSNTTREGYLLKCEYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR-----VP
CanalbRail 150 RMKQNTVERDYDMKCEYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR-----N
CandubRail 150 RMKQNTVERDYDMKCEYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR-----N
CanparRail 153 RLQRTSKEKVEYVYKCEYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR-----A
schpomRail 133 ----ETSYANQDRMCEYSGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR-----EDASNA
homsapDxo 176 ----ARPLRLMELMYSYGYKFEIATLNSPLQYTPREVIKRTKRIVSHGDEYISVVRTGVGN-CKLLGAEVDCVDFPKENGR-----RDGAFSTQ
consensus 331 kk ysGyfk l ti p r le r kklv d y svvhtglg klllaaEvdcmfdy

SaccarDx01 300 -VSEINTELKCFAPLSMHN---SNHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
Sacm1Dx01 300 -VSGANTELKCFAPLSMHN---SNHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
SackudDx01 300 -VSRNTTELKCFAPLSMHN---SNHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
SacuvaDx01 300 -VSKTNTTELKCFAPLSMHN---SNHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
CanglaDx01 268 -ITSHYTELKCAYKYNFNG---PNHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
NaucaDx01 274 -AEKFTTELKCFAPLSMHN---FHHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
NaudaiDx01 280 -VNKCTTELKCFAPLSMHN---HHRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
TetblaDx01 290 -LNTSYTELKCFAPLSMHN---PHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
TetphaDx01 298 -KTEETTELKCFAPLSMHN---AQHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
VanpolDx01 271 -VTMTETELKCFAPLSMHN---SAKEVLTQVTLGIPESDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
ZygroDx01 234 -LHTEETTELKCFAPLSMHN---AHHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
TordelDx01 271 -IFNRYTELKCFAPLSMHN---TAHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
KlulacDx01 267 -LTDTYTELKCFAPLSMHN---TYHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
LackluDx01 253 -KTDNVTELKCFAPLSMHN---SNHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
LactheDx01a 242 -AKRSYTELKTGTLKLVKS---AFHRRKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
LactheDx01b 247 PDSVRWQELTNAEVLDDLW-NKRSF---MKFKTQVLSRFSQCNLPIVIGLRD-TSGGLEDLLWYSENMVQKQDPSLPK-F-KNSFDPKP-HIGIQWLNHCHIAIESAF
HanomsDx01 274 -TEKVFAELKTVLNLNPS---SHAMKLLKTVTQGLLNSDIIIMIGLRD-SHSGQLLDIQWYSRDLCKKFNHPGLPT-N-KKELNYNA-QIAVEWCHYIEIAICKLV
CanalbDx01 240 -GLENVIELKTHKLADKISTINKLKLSTFTIQTKFDQHSIVGFRS-TDL-KIASIKKYTQRELAIVINSFPVFL---TKDCSINT-KSIFQWYNLVNINWLSKE
CandubDx01 241 -GLENVIELKTHKLADKISTINKLKLSTFTIQTKFDQHSIVGFRS-TDL-KIASIKKYTQRELAIVINSFPVFL---TKDCSINT-KSIFQWYNLVNINWLSKE
CanparDx01 232 -GLSNVVELKTHSSLPDDKLTANKLQRKLMALYCNKFTSCNYSIAIGFR-TDF-RLSSIKKYTQRELAIVINSFPVFL---TKDCSINT-KSIFQWYNLVNINWLSKE
Lypsta 263 NLDHVEVTELKTRVQSDR-DASTF-ENKLFKTVQCFLLGIPRIIYGFGRD-DH-ILTDVEVYNTTEVPVLLKKN-----PVTWGD-VDAIAKQYGALEWLLKTI
Yarlip 216 -GTSRYVELKTSREVHNK-DEGLI-ERKMNRWAQSFLLGVKHI IYGFRT-GD-KLAAVDFYKTEDLPMYAGAS-----STWSG-TDEINLNAALTKLNDL
Ogapol 227 DPLAHVVELKTSRVLDSQP-AVFSF-ENKLFKTVQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
Wiccif 223 NPLPHVVELKTSKVISEPK-HSIF-ENKLFKTVQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
Cybjad 223 NPLPHVVELKTSKVISEPK-HSIF-ENKLFKTVQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
Kompha 225 DPLSRVIELKTRTRINQYK-DMAF-ENKLFKTVQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
Metbis 238 DVLHAHAELKTSRVVETPQ-QAAG-ENKLFKTVQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
Canlus 237 SILSHYVELKTSRVVETPQ-NASAF-ENKLFKTVQCFLLGIPRIIYGFGRD-DH-ILTDVEVYNTTEVPVLLKKN-----PVTWGD-VDAIAKQYGALEWLLKTI
Canaur 244 DILKHVVELKTSRVVETPQ-KAVNF-ENKLFKTVQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
SaccarRail 234 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
Sacm1Rail 234 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
SackudRail 234 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
SacuvaRail 234 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
CanglaRail 239 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
NaucaRail 230 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
NaudaiRail 222 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
TetblaRail 225 NNLYHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
TetphaRail 224 DNLQHYIELKTSQVANNIS-DTHKF-ENKLFKTVQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
VanpolRail 225 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
ZygroRail 226 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
TordelRail 226 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
KlulacRail 230 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
ErecymRail 228 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
LackluRail 228 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
LactheRail 228 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
HanomsRail 228 DNLKHYAELKTSQVANNIS-DTHKF-ERKLFRTWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
CanalbRail 237 KLNHYVELKTSRIENNS-QVVSF-EQKLFKAWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
CandubRail 237 KLNHYVELKTSRIENNS-QVVSF-EQKLFKAWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
CanparRail 240 PSLSHVVELKTSKVIENNS-QILNF-ENKLFKAWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
schpomRail 232 NPNLHYVELKTSKVIENNS-QILNF-ENKLFKAWQCFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
homsapDxo 247 -PPTCVTELKTSKMHSPG-QWRSF-YRHLKLNKWAQSFLLGIPRIIYGFGRD-DH-ILRTVEEYKTEEPVLLKKN-----NPKRINC-IDALKWYGALEWLLKTI
consensus 441 l h yEIkcs l f erklFktwQcflLgv hiiyGfr d q llr ve ystdelpmmlk avkwyg liawl v

SaccerDx01 401 EANIS---D-----YSSTKPESFEIGIDTNNAIKITLKTTP-----RNVELFGM*-----
SacmikDx01 401 GANIS---D-----YSCKNPESFEISIDSNTIATITKLNIP-----KHVELFGTISI--H-V*-----
SackudDx01 401 EANIS---H-----YNSTRPESFEVSDANGTIAITKLNIVP-----KNVELFVT*-----
SacuvaDx01 401 EANIS---R-----YCNMKEPPEINIDANGTIIITKLSITP-----RNVEIFKT*-----
CanglaDx01 369 ASLLD---K-----FGRDEPQLFSIKVNNCNIIRIEHRQNP-----*-----
NaucaDx01 375 DENLD---Q-----KAINSPQGFQIRIDSRNRIRIKCLSKVP-----KDILEYL*-----
NaudaiDx01 381 DESID---K-----TRLNLSQSFQIRINASRAIQIKKLSKVP-----NNVTMYCKK*-----
TetblaDx01 391 RDYLK---K-----TPKAPSSVPVFRILVEKNRTITLLPKKVP-----ASVPIPDFYY--K-INVTESESSSPSTK*--
TetphaDx01 399 TKDTS---D-----TASNPMYKVIIDKHKSIITKLSIVP-----KNVEIPTDFL--*-----
VanpolDx01 370 SSSIA---D-----SNHPCSFKLIDNKHKTSIQKLSRIP-----QTVQRQPKKE--F-V*-----
ZygrouDx01 335 GENVD---R-----SSPQCFLKIDESHKIQLEKLVHP-----AHVELPIR*-----
TordelDx01 372 MKNSL---S-----SPDDPYPKYESFKVIVDKSHNIVKLLTKVP-----RHVQIPRAFR--*-----
KlulacDx01 369 LLLSQ---E-----STSTTFKVQIDTNLTLSPASQFV-----TALG*-----
LackluDx01 354 DKNLT---D-----EP---L--QSFKLLTRDLQLSLTKLANTP-----AGLIPKFLN--S-RLAAK*--
LactheDx01a 343 TPYVE---K-----TEAVSFKLLTLKQLLELRRLKIETPS-----TAKESPKPKP--A--HAQS*--
LactheDx01b 345 VDGEFYLIKRSVHSPVIRTPROELMFQAFIPGFSLLLEK---HEEQRNAFL---KRSRPNFFG--SRSEGRKDALEYKPVIAARKGSSSLTSASRKMKPKVP
HanomsDx01 377 KEHLA---G-----SNPTVPVAFRLTIDKYKNTLIDSLTKVTP-----ENVIITDELE--W-RKRVRKTNE--
CanalbDx01 343 I--TD-----HNTPQIFRLSFKRQELMNSYLKLEKILQ-----EDDNDTIFNDLVPEWQSFIMNLF*--
CandubDx01 344 I--TD-----PNTPQIFRLSFKRAQELINSYLIEMEKI-----QDDTIFNDLIPKWFQSPFIINTSNPLVVDH*--
CanparDx01 335 F--N-----DNQPRVFKLSFEREIELMDSHLSMKSVTG-----E-EELRIFNRLVPEWQNFY*--
Lypsta 364 PRAEE---D-----NVVWKRIVLPRSDYLTAAS-----KT-----DQSFLLHPGFVK--WRGEPMPK--
Yarlip 307 -PKED---D-----NKLWRLVFDANKKVDIT--EL-----DGESFLLEKFDV--WRKSM--
Ogapol 329 -PRDE---D-----TKTYRLVFDPAVNPVNLSENNATVTNQLLDPETGMISKAFRD--WRNELRSR--
Wiccif 324 -PKDE---D-----SKAFRISYDNKNKSFALN--ELPSDVSNDV--LS-TMLTDFKN--WRLOKRN*--
Cybjad 324 -PRDE---D-----SKSWRLTFDPQNKTLISLY--ELPDISAEV--LS-TLLPESFKQ--WRLOQRSSS--
Kompha 327 K---D-----DQVWKLISYAKNRNQLVVL--KEVTDENERQO--IVDSAIIPAWFKE--WRSELRNSEGNI--
Metbis 340 DVADE---D-----RSAYKLDYDPPGSRFMLS--ECVGDENRRL--RHGGILTPEFTA--WRETLRGR--
Canlus 331 DPSDE---D-----STTYTVTYDPSGRSFLA--ECIGDDGRV--RK-EILTDFCG--WREQLRSK*--
Canaur 346 DANDE---D-----SKAYKI IYDSGSRITFSLN--ECMGDENKRL--RNGEILTEFKS--WREQLRG*--
SaccerRail 332 PRDED---D-----P-----HSQIRAFKLVFENNHLRLSEI--EESDEYSGLI--DGEHILSNGFKE--WRKSLK*--
SacmicRail 332 PRDED---D-----P-----HAQIRAFKLVFENNHLRLSEI--EENDEYSNLV--IGEHLTNGFKE--WRKSLK*--
SackudRail 332 PRDED---D-----P-----HAQVRAFKLVFENNHLRLSEI--EENDEYSGLV--NEENILTNGFRE--WRKSLKK*--
SacuvaRail 332 PREED---D-----P-----HARIRAFKLVFENNHLRLSEI--EENDEYSGLV--DGESILTNGFKE--WRKSLKEQ*--
CanglaRail 337 PREQS---D-----GNIRAYRLVYENNHLRLSEI--EEQDEYSRYV--LEDGILTPEFKE--WRESLRVPSEETPKAD*--
NaucaRail 328 PRDQP---D-----KEIRPYKLVLENHLRLSEI--ESTDEEYSLV--NGESVLSKEFQE--WRLSL*--
NaudaiRail 320 PRDSG---D-----DEIRPYRLVFNENHLRLTEI--EKGETEFEDIV--NGESVLTNEFKE--WRTRLRSKSN*--
TetblaRail 322 PRNDD---D-----KKCYKLVFNENHLRLSEF--EESDQYDGLV--NGDVIIISKEFRE--WRTQLKSQDK*--
TetphaRail 322 PTEDT---D-----SVTKAYRLVFNENHLRLTEI--ESSEDEYEGVLV--NGETVINSNEFRE--WRTSLRTQ*--
VanpolRail 323 PRDDP---D-----SIKKAYRLVYENNHLRLTEI--TEEEGEFNELI--NGETVLTNEFKE--WRNSLVKVP*--
ZygrouRail 324 PRD-G---D-----DITIRAYRLVYENNHLRLTEI--EDTSEYQGLV--EGEELSDEFKK--WRKSMNERNL*--
TordelRail 324 PRDDV---D-----ANIKPYKLVYENNHLRLTEM--DEIDEEYDAIV--NGEAVITNDFKQ--WRTSLPQ*--
KlulacRail 328 PRPED---D-----D-----IDTIKAYKLVFNENHLRLTEI--ESDDEYKQLV--EGEELSNSFKQ--WRKDLRK*--
ErecymRail 325 PRESN---D-----TKITAYLLEFEHNHLRLSEI--EPSPHEYDGLV--NGEVVLSSETFKQ--WRTNLQTKDSNS*--
LackluRail 326 PHEN---D-----GGLRAYKLIYDSNHLKLENEV--EESDPEYEGVLV--EGESVLTNEFKE--WRRTLASRQT*--
LactheRail 326 PREE---S-----AEHIRAYRLTFENNHLRLVEI--EKSDEYDQLV--NGEGILTSEFRE--WRKSLNKS*--
HanomsRail 378 EYKE---D-----GQENYRFLFYQDNYLLEKLI--PDXDTE--KVX-EYKNXISSEFRK--WRLSLQH--
CanalbRail 340 DKKDE---D-----IKSYRLKYDVPVRSFTLS--ETDSETNEKL--RNGQLTPEFTE--WRQSLKK*--
CandubRail 340 DKKDE---D-----IKSYRLKYDVPVRSFTLS--ETDSETNEKL--RNGQLTSEFLE--WRQSLKK*--
CanparRail 345 DKTDE---D-----SVSNLKYDPLRKSLLVLS--EASKEENDRL--RNGLLTPEFKQ--WRQRMKK*--
schpomRail 328 KQHPP---D-----STEFLLSYTGGSKLVLRQII*-----
homsapDxo 343 VQDDP---D-----RLVHLFSWEPGGPVTVSV--HQDAPY-----AFLP---I--WVVEAMTQDLPSPPKTPS--PK--
consensus 551 f r l f d n r v v l s f w r v

SaccerDx01 -----
SacmikDx01 -----
SackudDx01 -----
SacuvaDx01 -----
CanglaDx01 -----
NaucaDx01 -----
NaudaiDx01 -----
TetblaDx01 -----
TetphaDx01 -----
VanpolDx01 -----
ZygrouDx01 -----
TordelDx01 -----
KlulacDx01 -----
LackluDx01 -----
LactheDx01a -----
LactheDx01b 445 VADVQVDKLANDLQQTSLQDRSFSDEAESRQTSNTKLVKSSTKPKRKAIVEE
HanomsDx01 -----
CanalbDx01 -----
CandubDx01 -----
CanparDx01 -----
Lypsta -----
Yarlip -----
Ogapol -----
Wiccif -----
Cybjad -----
Kompha -----
Metbis -----
Canlus -----
Canaur -----
SaccerRail -----
SacmicRail -----
SackudRail -----
SacuvaRail -----
CanglaRail -----
NaucaRail -----
NaudaiRail -----
TetblaRail -----
TetphaRail -----
VanpolRail -----
ZygrouRail -----
TordelRail -----
KlulacRail -----
ErecymRail -----
LackluRail -----
LactheRail -----
HanomsRail -----
CanalbRail -----
CandubRail -----
CanparRail -----
schpomRail -----
homsapDxo -----
consensus 661

Supplemental Figure S2. comPARE globally identifies targets of Dxo1 and reveals a role in 25S processing. Each data point represents a single nucleotide position in the genome. The PARE read abundance in DXO1 *xrn1* Δ (PARE score) is plotted on the x-axis. The \log_2 fold change when compared to a *dxo1* Δ *xrn1* Δ deletion strain (comPARE score) is plotted on the y-axis. A positive comPARE score indicates a Dxo1 product while a negative score implies a Dxo1 substrate. This is demonstrated by the highlighted 5' 25S and the 5' extended 25S or 25S' sites.

