

MMs	1	EFEAYVNASGEHGVVFSLGSMVSEIPEKKAMEIAEALGRIPQTVLWRYTGTGTPSNLAKN
RN	1	EFEAYVNASGEHGVVFSLGSMVSEIPEKKAMEIAEALGRIPQTVLWRYTGTGTPSNLAKN
MMa	1	EFEAYINASGEHGVVFSLGSMVAEIPEKKAMAIADALGKIPQTVLWRYTGTGTPPSNLANN
PA	1	EFEAYINASGEHGVVFSLGSMVAEIPEKKAMAIADALGKIPQTVLWRYTGTGTPPSNLANN
HS	1	EFEAYINASGEHGVVFSLGSMVSEIPEKKAMAIADALGKIPQTVLWRYTGTGTPSNLANN
PT	1	EFEAYINASGEHGVVFSLGSMVSEIPEKKAMAIADALGKIPQTVLWRYTGTGTPSNLANN
CF	1	EFEAYVNASGEHGVVFSLGSMVSDIPEKKAMEIADALGKIPQTVLWRYTGTGTPPNLSKN
BT	1	EFEAYVNASGEHGVVFSLGSMVSEIPEQKAMEIADALGKIPQTVLWRYTGTGTPPNLAKN
MD	1	EFEAYVNASGEHGVVFSLGSMVSEIPMAKAMEIAFALGTIPQTVLWRYTGTGTPPSNLAKN
GG	1	EFEATVNASGEHGVVFSLGSMVSEIPMKKAMEIADALGSVPQTVLWRYTGEVPPPNLPKN
XT	1	EFEKIVNSSGEHGVVFSLGSMVSEIPMNKAMDIAEALKSIPQKFWRYTGKAPPNLCE
DR1a	1	ELEEFVNNGSGEHGFVVFTLGSMSQLPEAKAREFFEAFRQIPQRVLWRYTGPVPENAPKN
DR1b	1	EVEEFVNNGSGEHGVVFSLGSLVSSMPKEKAIDFFKAFSMIPQRVLWRYTGEIPNNVPE

MMs	61	TILVKWLPQNNDLLGHPKTRAFITHSGSHGIYEGICNGVPMVMMPLFGDQMDNAKRMETRG
RN	61	TILVKWLPQNNDLLGHPKTRAFITHSGSHGIYEGICNGVPMVMMPLFGDQMDNAKRMETRG
MMa	61	TILVKWLPQNNDLLGHPMTRAFITHAGSHGIYEGICNGVPMVMMPLFGDQMDNAKRMETKG
PA	61	TILVKWLPQNNDLLGHPMTRAFITHAGSHGIYEGICNGVPMVMMPLFGDQMDNAKRMETKG
HS	61	TILVKWLPQNNDLLGHPMTRAFITHAGSHGVYESICNGVPMVMMPLFGDQMDNAKRMETKG
PT	61	TILVKWLPQNNDLLGHPMTRAFITHAGSHGVYESICNGVPMVMMPLFGDQMDNAKRMETKG
CF	61	TILVKWLPQNNDLLGHPKTRAFITHSGSHGIYEGICNGVPMVMIPLFGDQMDNAKRMETRG
BT	61	TKLVKWLPQNNDLLGHPKTRAFITHSGSHGIYEGICNGVPMVMMPLFGDQMDNAKRMETRG
MD	61	TKLVKWLPQNNDLLAHPKTRAFITHAGSHGIYEGICNGVPMVLMPLFGDQMDNAKRMEESRG
GG	61	VKLVKWLPQNNDLLAHPKTRAFITHGGSHGVYEGICNAVPMVLMPLFGDQMDNAKRVESRG
XT	61	THLVKWLPQNNDLLAHPKTRAFITHAGSHGIYEGICNAVPMVMMPLFGDQMDNAKRRIESRG
DR1a	61	VKLMKWLPQNNDLLGHPKVRAFVTHGGSHGIYEGICNGVPMVMLPLFGDQGDNAQRLVSRG
DR1b	61	VKLMKWLPQNNDLLGHPKTRAFITHGGTHGIYEGICHGVPVMVMLPLFGDQADNVHRVATRG

MMs	121	AGVTLNVLEMTADDLENALKTVINNKSYKENIMRLSSLHKDRPIEPLDLAVFWVEYVMRH
RN	121	AGVTLNVLEMTADDLENALKTVINNKSYKENIMRLSSLHKDRPIEPLDLAVFWVEYVMRH
MMa	121	AGVTLNVLEMTSEDLENALKAVINDKSYKENIMHLSSLHKDRPVEPLDLAVFWVEFVMRH
PA	121	AGVTLNVLEMTSEDLENALKAVINDKSYKENIMHLSSLHKDRPVEPLDLAVFWVEFVMRH
HS	121	AGVTLNVLEMTSEDLENALKAVINDKSYKENIMRLSSLHKDRPVEPLDLAVFWVEFVMRH
PT	121	AGVTLNVLEMTSEDLENALKAVINDKSYKENIMRLSSLHKDRPVEPLDLAVFWVEFVMRH
CF	121	AGVTLNVLEMTSADLANALKAVINDKSYKENIMHLSRLHKDRPIEPLDLAVFWVEFVMRH
BT	121	AGVTLNVLEMSSEDLEKALKAVINEKTYKENIMRLSRLHKDRPIEPLDLAVFWVEFVMRH
MD	121	AGVILNVLDMTSSDLSKALKTVINDKSYKENIMRLSALHKDRPIDPLNLAVFWVEFVMRH
GG	121	AGLTLNILEMTSKDISDALKAVINDKKYKENIQRLSDLHLDRIHPLDLAVHWVEFVMRH
XT	121	AGLTLNVLHMTPEDLSNAVRVINNPVYKENIQRMSSLHLDRIHPLDLAVHWVEFVMRH
DR1a	121	VAESLTIIYDVTSEKLLVALKKVINDKSYKEKMMKLSAIHDRDRPIEPLDLAVFWTEFVMRH
DR1b	121	VGVILSIHDITVETLLDALNSVINNSSYKQMKLSAIHNDRPIQPLDLAVFWTEFVMRH

MMs	181	KGAPHLRPAAHDLTWYQYHSLDVIGFLLAIVLTVVFIVFKCCAYGCRKCFGKKGRVKS SHKS KTH
RN	181	KGAPHLRPAAHDLTWYQYHSLDVIGFLLAIVLTVVFIVYKSCAYGCRKCFGKKGRVKS SHKS KTH
MMa	181	KGAPHLRPAAHDLTWYQYHSLDVIGFLLAIVLTVAFIAFKCCAYGYRKCFGKKGRVKA AHKS KTH
PA	181	KGAPHLRPAAHDLTWYQYHSLDVIGFLLAIVLTVAFIAFKCCAYGYRKCFGKKGRVKA AHKS KTH
HS	181	KGAPHLRPAAHDLTWYQYHSLDVIGFLLAIVLTVAFITFKCCAYGYRKCLGKKGRVKA AHKS KTH
PT	181	KGAPHLRPAAHDLTWYQYHSLDVIGFLLAIVLTVAFITFKCCAYGYRKCFGKKGRVKA AHKS KTH
CF	181	KGAPHLRPAAHDLTWYQYHSLDVIGFLLAIVLTVAFITLGVVFIITYKCCAFCRKGKGRVKKPHKS KA
BT	181	KGASHLRPAAHDLTWYQYHSLDVIGFLLAIVLTVAFITFKACAFARKCFGKKERVKK SHKS KTH
MD	181	KGAPHLRAAAHDLNWIQYHSLDVIAFLLAIVLTVVLIIVKSCFKFRKCFGKKAKKSTKPKSH
GG	181	KGAPHLRPAAHDLNWIQYHSLDVFAFLLAIVLTVVLLSLFISVKCCMFCCRCCFKGRKS SGKS KTH
XT	181	KGAPHLRPAAHDLNWFOQYSLDVIGFLLAIVLTLALFISLKCCTFVFRRCFKKRKS QKKKA~~~~~
DR1a	181	KGAPHLRPAAHDLNWIQYHSLDVIGFLLIILLTIVFVTKSCMFCFRKCFKKSQKKKA~~~~~
DR1b	181	KGADHLRPAAHDLNWIQYHSLDVIGFLLIIVLTVTLAMLKCCSLCWRRCCRKTQKRKED~~~~~

Transmembrane segment