

DR2a3 1 ~~~~~MTSGALLVCLLLCGVDVGVSGRVLVMPGEYSHWHNMRATIEALVDRNHSVTVL  
DR2a4 1 ~~~~~MTSGTLLVCLLLCGVDVGVSGRVLVMPGEYSHWHNMRATIEALVDRNHSVTVL  
DR2a2 1 ~~~~~MMKCLLKPSPVLVLFIF..FSFTHAGNVLVLPGEYSHWQNRNVVDELNRNHSVTVL  
MMS2a1 1 ~~~~~MLKNILLCSLQISLLGMSLGGNVLIWPMEGSHWLNVKIIIDEELRKEHNVTVL  
RN2a1 1 ~~~~~MLKNILLWSLQISLLGMSLGGNVLIWPMEGSHWLNVKIIIDEELRKEHNVTVL  
PT2a1 1 ~~~~~MLN.NLLLFSLQISLIGTTLGCVLIWPMEGSHWLNVKIIIDEELIKKEHNVTVL  
HS2a1 1 ~~~~~MLN.NLLLFSLQISLIGTTLGCVLIWPMEGSHWLNVKIIIDEELIKKEHNVTVL  
MMA2a1 1 ~~~~~MLN.NLLLFSLQISLIGTTLGCVLIWPMEGSHWLNVKIIIDEELIKKEHNVTVL  
CF2a1 1 ~~~~~MLNKNILLLSLKLISLIGTTLGCVLIWPMEGSHWLNKIIIDEELIKKEHNVTVL  
PT2a2 1 ~~~~~MPKKFVQMLVFNLTLETVLSGNVLIWPTDGSWLNKIIILEELIQRNHNVTVL  
HS2a2 1 ~~~~~MPKKFVQMLVFNLTLETVLSGNVLIWPTDGSWLNKIIILEELIQRNHNVTVL  
MMA2a2 1 ~~~~~MPKKFVQMLVFNLTLETVLSGNVLIWPTDGSWLNKIIILEELIQRNHNVTVL  
CF2a2 1 ~~~~~MPKKFVQLLVFNLTLETVLSGNVLIWPTDGSWLNKIIILEELIQRNHNVTVL  
MMS2a2 1 ~~~~~MIKKVQLLIFHLILAEIVLSGNVVWPTDGSWLNKIIILEELVQRNHSVTVL  
RN2a2 1 ~~~~~MIKKVQLLIFPLALTEIVLSGNVVIWPSDGSWLNKIIILEELVQRNHSVTVL  
DR2a1 1 MSPRGSTGVFLLLALLNQLLQVLS.GCKILVWPAEFESHWLNKIVILDVLIERGHNITVV  
Signal peptide

DR2a3 54 VGSSSPVTPHTQ.KARFDYHVFVKVNMDDKEADAVWSDFIYLWMNE..IATKYETVSH.IIF  
DR2a4 54 VSSSPVTPHTQ.KERFDYHVFVKVNMDDKEAKVIWSDFTHLWMKE..TDSKIERGFL.IIW  
DR2a2 56 VCSASPTINFTQ.QERFQYLVEFVPLSAQELDGASEELIHTWTOH.PSPNRLQATALQ.III  
MMS2a1 54 VASGALFITPSSISPSLTFEIIYVPVFGKEKIESVIKDFVLTWLENRPSPTIWTIFYKEMA  
RN2a1 54 VASGALFITP.SVSPSLTFEIIYVPVFGKEKIESVIKDFVLTWLENRPSPTIWTIFYKEMA  
PT2a1 54 VASGALFITPTS.NPSLTFEIIYKVPFGKERIEGVKDFVLTWLENRPSPTIWRFYQEMA  
HS2a1 54 VASGALFITPTS.NPSLTFEIIYRVPFGKERIEGVKDFVLTWLENRPSPTIWRFYQEMA  
MMA2a1 54 VASGALFITPTS.NSSLTFEIIYKVPFGKERIEGVINDIVLTWLENRPSPTIWRFYQKMA  
CF2a1 55 VASGALFITPTF.NPSLTFEIIYKVPFDKGRVEGIKDFVLTWMENRPSPTIWRFYQEMA  
PT2a2 55 ASSATLFIN.SNPDSPVNFVEVIVPSYKKSNIIDSLIEHMIMLWIDHRPTPLTIWAFYKELG  
HS2a2 55 ASSATLFIN.SNPDSPVNFVEVIVPSYKKSNIIDSLIEHMIMLWIDHRPTPLTIWAFYKELG  
MMA2a2 55 ASSATLFIN.SNPDSPVNFVEVIVPSYKKSNIIDSLIEHMIMLWIDHRPTPLTIWAFYKELG  
CF2a2 55 ASSTILFIN.SNPDSVNFVEVIVPSYKKSNIIDSLIEHMIMLWIDHRPTPLTIWAFYKELG  
MMS2a2 55 APSETLFIN.SRLDAFINFEEIPVSYTKSKIDEIIEHMIALWLDHRPTPLTMWTFYKELG  
RN2a2 55 AASETILFIN.SSPDAFISFEEIPVSYTKSKIDEIIEHMIALWLDHRPTPLTMWTFYKELG  
DR2a1 60 THTATPSV.QITPSAGYNAEILQVPYTKQEIVDNLERMLKYWTHDLPNDNIITASKL.IIH

DR2a3 110 QVMSRFMTLTDEVCKGMF.NEDLLQMLRESHYNVLFSDPMPPCSDLMAQTLNIPLVLSLR  
DR2a4 110 RVMSNFRRLAADVCRSLLQNDLLQMLGESHYDVLFSDPMPPCSDLMAQTLNIPQVLSLR  
DR2a2 113 ELLGRVFRVMHRAMCDSMLRNDALIGQLSALKFDVLFNDPMEFCADLLAEMLDLPLVLSVR  
MMS2a1 114 KVIEEFHLVSRGICDGLVKNKELMSLQKQKFEVLSDPVFPDGDIVALKLGIPIFYSLR  
RN2a1 113 KVIEEFHLVSRGICDGLVKNKELMTKLQKQKFEVLSDPVFPDGDIVALKLGIPIFYSLR  
PT2a1 113 KVIKDFHVMVSOEICDGLVKNQQLMEKLLKSKFEVLSDPVFPDGDIVALKLGIPIFYSLR  
HS2a1 113 KVIKDFHVMVSOEICDGLVKNQQLMAKLLKSKFEVLSDPVFPDGDIVALKLGIPIFYSLR  
MMA2a1 113 KAIKNFHIVSREICDGLVKNQQLMEKLLKSKFEVLSDPVFPDGDIVALKLGIPIFYSLR  
CF2a1 114 KVIKNFHMVSREICDGLVKNQQLMDKLLKSKFEVLSDPVFPDGDIVALKLGIPIFYSLR  
PT2a2 114 KLLDTFFQINIQLCDGLVKNPKLMARLQKGGFDVLVADPVTICGDLVALKLGIPIFYTLR  
HS2a2 114 KLLDTFFQINIQLCDGLVKNPKLMARLQKGGFDVLVADPVTICGDLVALKLGIPIFYTLR  
MMA2a2 114 NLLDTFFQINMQICDGLVKNPKLMARLQKGGFEVLVADPVTICGDLVALKLGIPIFYTLR  
CF2a2 114 KLLDTFFRINIQLCDGLVSNPKLMARLQKRGFDVLVADPVTICGDLVALKLGIPIFYTLR  
MMS2a2 114 NLLDTFFYTTNKQICDGLVNNPTVMARLQKGGFDVLLADPVTICGDLVALKLGIPIFYTLR  
RN2a2 114 KLFAAFYKINKQICDGLVKNATLMARLQKGGFDVLSDPVTMCGELVALKLGIPIFYTLR  
DR2a1 118 EMITATATAQNKITCNALFSRAELLEKWKMEKFDVILADPLYICGEILAQKLDIPLIFSLR

DR2a3 169 AIFAYSFERMCGQMPAPPSYVPAASLRDYLTD RMSFMERVENMLLYFSHVFFKLYMMFTFDRIYTEIR  
DR2a4 170 LIFAYTFERMCGQMPAPPSYVPAVALTDHLTD RMSFMERVENMLLYFHTTVFRLNTMLTVDRLYTEIR  
DR2a2 173 ISPGFLERMCGQMPAPPSVFPIT..QIVLTD RMSFMERVENMLIANIVFSVSFYIVAWISLDSYTDVL  
MMS2a1 174 FSPASTVEKHCGKVPFPSPSYVPAVL..SELTQMSFTDRVRNFISYRMQDYMFETLWK.QWDSYYSKAL  
RN2a1 173 FSPASTVEKHCGKVPFPSPSYVPAVL..SELTQMSFADRVRNFISYRMQDYMFETLWK.QWDSYYSKAL  
PT2a1 173 FSPASTVEKHCGKVPFPSPSYVPAVL..SELTQMSFTDRIRNFISYHLQDYMFETLWK.SWDSYYSKAL  
HS2a1 173 FSPASTVEKHCGKVPFPSPSYVPAVL..SELTQMSFTDRIRNFISYHLQDYMFETLWK.SWDSYYSKAL  
MMA2a1 173 FSPASTVEKHCGKVPFPSPSYVPAVL..SELTQMSFTDRIRNFISYHLQDYMFETLWK.SWDSYYSKAL  
CF2a1 174 FSPASTVEKHCGKVPFPSPSYVPAVL..SELTQMSFTDRVRNFISYSLQDYMFETLWK.SWDSYYSKAL  
PT2a2 174 FSPASTVERHCGKIPAPVSYVPAAL..SELTQMTFGERIKNTISYSLQDYIFQSYWG.EWNSYYSKIL  
HS2a2 174 FSPASTVERHCGKIPAPVSYVPAAL..SELTQMTFGERIKNTISYSLQDYIFQSYWG.EWNSYYSKIL  
MMA2a2 174 FSPASTVERHCGKIPAPVSYVPAAL..SELTQMTFGERIKNMISYSLQDYIFQSYWG.EWNSYYSKIL  
CF2a2 174 FSPASTVERHCGKIPAPVSYVPAAL..SELTQMTFGERVKNNTISYPLQDYIFQSYWG.EWNSYYSKVL  
MMS2a2 174 FSPASTVERHCGKIPAPVSYVPAAL..SELTQMSFGERVKNNTISYSLQDYIFKTYWG.EWNSYYSKVL  
RN2a2 174 FSPASTVERHCGKIPFPVSYVPAAL..SELTQMTFGERVKNNTISYSLQDYIFKSYWG.EWNSYYSRVL  
DR2a1 178 FITFNTLERLCCQMPAPPSYVPAVA..SEKTDQMDFTDRKKNLYFYGMQDFLFYLVTKFKWDHYSEVL