

Lamprey V1R aligned to V1r pheromone receptor-like AAX10116 [Danio malabaricus]

Score = 75.5 bits (184), Expect = 6e-12, Method: Compositional matrix adjust.
 Identities = 70/280 (25%), Positives = 135/280 (48%), Gaps = 24/280 (8%)

Query 17 GTIGNTCVLTVFLHIAVKNGLLPSDRSVINMSIVHLLASVFNKILYVDFDFKMH-LLNN 75
 G + NT VL + HI + + +L P D + + + L + + + F M LL++

Sbjct 1 GILTNLTVLLAYTHIRLTDSQLQPVDAILCHLAFADLMLLLTRCVPQMTVF GMRNLLDD 60

Query 76 IGCRLLYSINLFRTLSISFTLLLSLQFNKLQNSTYPGINVISLKFESICLVSVLLWI 135
 GC+++Y+ + RTLS+ T +LS+FQ + P + + + + + V LW

Sbjct 61 AGCKVVIYTYRIARTLSVCITCMLS VFQAVTVAPEAGPQLSRLKARLPQLVPTPTFVALWF 120

Query 136 ISSAIFTPLFFDDILTLNNSGLLQFSSCSISPSGGYHLYFGIGTIILVDGFG----- 189
 I+ A+ FF ++ +G + + + G H+ F +++G

Sbjct 121 INMAVCIAAPFF----SVAPRNGTVPFPFTLNL---GFCHVDFRDNLSYVINGVAVSVRDF 173

Query 190 AF--AIVTMNVLILKILWKHHMVAARGWVHNANHMATLNAVKIVACLITITYIICWSINI 247
 AF A++ + IL +L +H V RG + A + V L++ Y + + I +

Sbjct 174 AFVGMALGSSGYILVLLHRHGRRV--RGIRRSQGSTMETRAARTVEMLVVLYAVFFGIDN 231

Query 248 IIRILLMRFGASLSAIP--MADIASVFSSLYSFSFPFIII 285
 +I I ++ ++ +P +AD+ FSS Y S SPF+II

Sbjct 232 VIWIYML----TVPQVPPVADMRVVFSSCYASVSPFLII 267

^conserved in Mus V1Rs (Pfister and Rodriguez)	AAX10116	G-ILTN-	5
conserved in fishes	3717.V1R311	G-TIGN-	21
N-linked glycosylation site	11722.V1R311	G-VVFN-	23
Not conserved in ORs (Saraiva and Korsching)	18775.V1R342	G-FVGN-	48
Conserved in ORs (Niimura and Nei)	2061.V1R320	NLFMTAP	39
In fish V1R but not mammal V1R (Niimura and Nei)	.	:	:

gi|59891918|gb|AAX10116.1| -----TLVLLAYTHIRLTDSQLQPVDAILCHLAFADLMLLLTRCVPQTM 49
 3717.V1R311 -----TCVLTVFLHIAVKNGLLPSDRSVINMSIVHLLASVFNKILYVDF 65
 stig_11722.V1R311 -----ALILGVIANACAYECLPPSDAILVNLAFVNLISLVRNGPLLF 67
 stig_18775.V1R342 -----SLVI-IITGFKIKKS--TPT-ILIMNLAIADFILITLPLWIVH 88
 stig_2061.V1R320 SLCLFLSITVITFTEVKLREN---SRYILFASLLACDTFFLLCSTIMSTF 86

gi|59891918|gb|AAX10116.1| TVFGMRNLLDAGCKVVIYTYRIARTLSVCITCMLS VFQAVTVAPEAGPQ 99
 3717.V1R311 DFFKM-HLLNNGICRLLLYSINLFRTLSISFTLLLSLQFNKLQNSTYPG 114
 stig_11722.V1R311 WDAGVRMSLSVGC LCMGVWVVTESVSVVTTLTSMFHLYLMVS-RRHTS 116
 stig_18775.V1R342 YALDYHWPYGHLMCKIMPFI SYVNVNTASIFYVTTLSLDRFLLAV--QHPW 136
 stig_2061.V1R320 IWLQTNLSLTS--CSVNTMVSTILNQSGVLCVTLMSVERYVAIC---HP- 130

gi|59891918|gb|AAX10116.1| LSRLKARLPQLVPTTFVA-LWFINMAVCIAA--PFFS-VAPRNGTVPFPFT 145
 3717.V1R311 INVISLKFESICLVSVL-LWISSAIFTPL--LFFDDILTLNNSG--L 159
 stig_11722.V1R311 VKGKTSALRN-AALTLLC-VWAANVLFSLPA--VVFSGN SAGNFERLML 162
 stig_18775.V1R342 VPKIRT-MNN-TILVCFG-VLFLASLSIPT--FVFSKAL EHNQGVYCYQ 181
 stig_2061.V1R320 FHHPRC-FSHRKTFLAIIVSVASVFPLACGILVFTSGVTVNNIRT--- 176

gi|59891918|gb|AAX10116.1| LN-----LGFCHVDFRD---NLSYVINGVAVSVRDF-AFVGMALGSSGY 185
 3717.V1R311 LQ-----FSSCSISPSGG-YHLYFGI-GTIILVDGFGAF--AIVTMNVL 199
 stig_11722.V1R311 VSGTVRPLLG-CVLHFA SAREGLAYTT--ASMIINEIVP-IV-LMVTVNIK 208
 stig_18775.V1R342 DND---LVDHAAIILAN--FVINFLI---PITIMSF-CYLYIVLKMRSRV 221
 stig_2061.V1R320 -----CSTYLT-----SLMP--NPMAITVLRSP-NVIIFSV 207

gi|59891918|gb|AAX10116.1| ILVLLHRHGRRV--RGIRRSQGSTMET-RAARTVEMLVVLYAV--FFGID 230
 3717.V1R311 ILKIWKHHMVAARGWVHN-ANHMATLNAVIVACLITITYII--CWSIN 246
 stig_11722.V1R311 TLLIHRHRRLQHVASLMP-SRVSTV-KAKVIMVVTIIVVI--CWGIH 254
 stig_18775.V1R342 SYSANRRAINLIIAIVVVFCLCWLPHY-FLVDIVEGLSILHDVNKYWHVS 269
 stig_2061.V1R320 IIALIFTYFNIMMAARKASDDASKAKR-AKQTVILHGLQLLY--LCSLG 254

gi|59891918|gb|AAX10116.1| N----VIWIYMLTV--PQVPPV--VADMRVVFSSCYASVSPFLII---- 267
 3717.V1R311 I----IIRILL-MRFG-ASLSAIP-MADIASVFSSLYSFSFPFIIIFGRS 289
 stig_11722.V1R311 -----VFAINY-YNY--RQDDLEWLISLARFSTAINISMGLILLVVCHG 296
 stig_18775.V1R342 HETNKAKRILISLAFSHSCLNPIL-YAFLAKGFRTOFKS--AFILQYFEH 316
 stig_2061.V1R320 N---RFFEILFAIIT--TDRNMIT-ILRLCN-YLCLYYS-SRFVVPLIYG 296