

T-COFFEE, Version_5.49Wed Dec 19 12:12:01 2007

Cedric Notredame

CPU TIME:34 sec.

SCORE=56

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BAD **AVG** **GOOD**

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PSS	:	57
TAAe	:	54
TAFi	:	55
TAS	:	51
TBT	:	55
TSS	:	57
TDM	:	50
TLS1	:	53
TLS7	:	54
TNV	:	53
TPC	:	57
TPV	:	58
TPL	:	58
TRY1	:	46
TRY2	:	53
TRY3	:	53
TRY4A	:	57
TRY4B	:	55
TRY5A	:	55
TRY5B	:	59
TRY5K	:	58
TRY5C	:	58
TRY5D	:	56
TRY5E	:	56
TRY5F	:	59
TRY5L	:	59
TRY5G	:	59
TRY5I	:	58
TRY5H	:	57
TRY5J	:	59
TRY5M	:	56
TTC	:	53
ChBT	:	57
ChPO	:	54
cons	:	56

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PSS      -M-NS-F-TIL-IV--TYFSLAF---GS-RCGI-----
TAAe
TAFi
TAS      MSNKI-AILLAILVAVVACVEVQ---ASQRPR---TARPLPHFLP---RPQ
TBT      --MHP--LLIL-AF---VGAAVAF---PS-----
TSS      -MIS--LVFV-LL---IGAAFA-----
TDM      -MLKI--VILL-SA---VVCALGG---TVPEGL---LPQL-----
TLS1     --MNK-FISALFFL--VATALAK---PN-DGI---TKSIMDM---RLMYP
TLS7     --RFF--CAL-LFL---VVAANAV---PPQ---IKYSESFMRV---KSMR
TNV      ---MLICN---AFCYVAAMTAEMQLEQAC---RPNIVIAVQTL---AKFSL
TPC      --MKY--LVFC-LL---LGAAFAA---PSR-KP---TFRRG-----
TPV      --S--LVLC-LL---LAGAFAA---PSR-KP---TFRRG-----
TPL      PAMKT--LVFC-LL---LVGALAA---PSRRL---RFPP-----
TRY1     -MCRF--LFIF-LL---WNYATR---DTA---SIADAP
TRY2     --MKI--YLVLLT--VFTVTTA---SS---LARFPLSVFLD---TELI
TRY3     -MAKLVAIVGAIC--VQCFFAL---PS---PGRNDLVWR
TRY4A    --MKF--LILVCC--LLSCAAG---NSL---FPRLPL-FYRT---DQPS
TRY4B    -MKSA--LILLIV--LVAGATA---KLT---LPRLPLNVLMR---GGWP
TRY5A    -MMKH--SILV-TL---FACVLAV--GAAPS-----
TRY5B    -MNKI--ILLA-AL---FACAYAA---PQ-RMV---LPRLPAKVILN---GKYQ
TRY5K    -MNKI--ILLA-AL---FACAHAA---PH-HMV---LPRPPANVILN---GQYQ
TRY5C    -MNKI--VILA-LL--YFACIHAV---PQ-RMV---LPRLPASVILS---GKYQ
TRY5D    --MKL--ILLA-TF---VACAFGA---PH-RMV---LPRLPVSVILT---GKFQ
TRY5E    --MKI--IVLA-AF---FAFALAM---PK-RMV---LPRLPAAVMMS---GKYQ
TRY5F    --MKI--VILA-AL---FACAMAM---PK-RMV---LPRLPASVIMS---GKYQ
TRY5L    --MKI--VILA-VL---FACAMAM---PK-RMI---MPRLPASVIMK---GKYQ
TRY5G    --MKF--LVLA-AL---FACACAL---PQ-RMV---LPRLPASVISK---GKFQ
TRY5I    --MKF--VVLA-TL---LTYSWAA---PH-PPI---LPRLPIKDIVS---G-HQ
TRY5H    --MKC--FLLA-TL---LVFAWAA---PQGRAV---LPRLPLNIILN---KRFQ
TRY5J    --MKF--VILAATI--LACVIAN---PSTRSV---LPRLPLKVLLS---GKFQ
TRY5M    --MKT--VVLLATF--VVCCSTV---IS-ESVTS-SPHRASLIMN-NRGSYQ
TTC      --MKS--FLLIVFL--VATASAV---PS-YL-----RTNS
ChBT
ChPO     --MGI--LSCL-AF---AGAAYGCGSP

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cons 

PSS	-----KNGPMLDEFNR
TAAe	-----TMVERSDSSGR
TAFi	-----LVPESK
TAS	-----YSVGHR
TBT	-----DDDDK
TSS	-----TEDDK
TDM	-----DGR
TLS1	-----NQFDGR
TLS7	-----HRFGGR
TNV	QIKISVFEADTCGVLANCLTFFYYTLIFLNFVLIFAIARTVALGVSNDPDDGR
TPC	-----LNK
TPV	-----LNK
TPL	-----NNYK
TRY1	-----ALRPTR
TRY2	-----RTKRDGR
TRY3	-----RKAATPL
TRY4A	-----LLSGEK
TRY4B	-----MIDDER
TRY5A	-----RDNK
TRY5B	-----LIPEDK
TRY5K	-----LIPEDK
TRY5C	-----LIPEDK
TRY5D	-----FVPEDK
TRY5E	-----LIPKDK
TRY5F	-----LIPEDK
TRY5L	-----LIPEDR
TRY5G	-----LIPSNK
TRY5I	-----LKLSEK
TRY5H	-----NAISSDR
TRY5J	-----MIPEDK
TRY5M	-----RIPQEK
TTC	-----LLPDGR
ChBT	-----AIQPVLSGLSR
ChPO	-----AIPPVITGYSR
cons	-----

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PSS IVGGEEAEPGEFPWQISLQVVS - W - - - - - YG - - SYHYCGGSILDES WVVTAAH
TAAe IVGGFEVPVVEEVPFQVSLSGVG - - - - - - - - - - - SSHFCGGSLLSERWVMTAGH
TAFi IVGGDPVNKGDVPWQVSLQREG - F - - - - - FG - - RSHFCGGSILDADTVLTAAH
TAS IVGGFEIDVSETPYQVSLQYF - - - - - - - - - - - RSHRCGGSVLNKNKWLTAAH
TBT IVGGYTCAENSVPYQVSLNA - - - - - - - - - - - GYHFCGGS LINDQWVVSAAH
TSS IVGGYECKAYSQTHQVSLNS - - - - - - - - - - - GYHFCGGS LNVNENWVVSAAH
TDM IVGGSATTISSFPWQISLQRS - - - - - - - - - - - SHSCGGS IYSANII VTAAH
TLS1 IVGGEEAEPNAPFYQLSLRSGG - L - - - - - L - - SYHFCGAS IYDEKTAITA AH
TLS7 IVGGEEVEPN SIPFQV SFQTG - - - - - - - - - - - GFHF CGAS VMDKDT II TA AH
TNV VVGGYETSIEQHPPYQVSLRYKG - - - - - - - - - - - RHKCGGA IIAEDWVITA AH
TPC IVGGTEVTPGEIPYQLSFQDTS - F - - - - - GG - - EFHF CGAS IYKDTWAICAGH
TPV IVGGS DATP GELPYQLSFQDVS - F - - - - - GF - - AFHF CGAS IYNENWAICAGH
TPL IVGGTDASLGEFPYQLSFQEKF - L - - - - - GF - - SFHF CGAS IYNENYAITAGH
TRY1 IVNGEEVRDGEV TWQISL QLSS - AVSGENRQRT - MSHFCGGA IINSQWAITA AH
TRY2 IIGGADAKEG EFPMVSLQRNG - F - - - - - FG - - RSHFCAGS IADARSII TA AH
TRY3 IVGGEEALPNEFP FMVSMQSLA - V - - - - - GGT - - YNHRCGGA VINERWVVSASH
TRY4A IVGGTQATPNEFPWQISLQRRG - V - - - - - LSS - YSHSCGGSVYNNNYIIDASH
TRY4B IVGGTQASPNEFPYQISLRRLG - - - - - - - - - - - SHICGAS IYKSGWII TA AH
TRY5A IINGGEVVPYSLPFVVTIQTKT - - - - - - - - - - - GNT - FTHLCAGS ILDESTILTSAG
TRY5B IVGGSEVVPNSLPFQISLQRRS - - - - - - - - - - - FGG - FSQSCGGS ILNENTILDAAH
TRY5K IVGGSEVVPNSLPFQISLQRRS - S - - - - - FGG - FSHSCGGS ILNENTILNAAH
TRY5C IVGGKEVVPNSLPFQISLQRKS - A - - - - - SGI - FSQSCGGS ILNENTILDAAH
TRY5D IVGGAEVVPNSLPFV VSLQRKF - L - - - - - T-L - STHACAGT ILDEKTI LTA AH
TRY5E IVGGAVVEPN SLPFQV SLQRLS - GT - - - - - TGQ - YSQSCGGS ILDDSTILNAAH
TRY5F IVGGAVVAPNSLPFQVSLQRRG - S - - - - - TGS - FSQSCGGS ILDANVII DA AH
TRY5L IVGGVIVEPN SLPFQV SLQRRG - S - - - - - TGT - FSQSCGGS ILDENVILDA AH
TRY5G IVGGTEVEPN SLPFQV SLQRKG - L - - - - - TGL - YSQSCGGS ILDENTILDAAH
TRY5I IIGGVEVVPNSLPFQV SIQRGS - - - - - - - - - - - AGV - YTQSCGGS ILNETTVLTA AH
TRY5H ILSGSEVVPNSLPFQVSLQRRG - L - - - - - NGA - YVQVGGGS ILDDSTILHAAH
TRY5J IVGGTEVAPNSLPFQISLQRRG - LL - - - - - PNSA - YSHICGGS ILDATTILDA AH
TRY5M IVGGTIVVPNSLPFQVSIQRSS - D - - - - - AGSRW - AHYCGGVILDANV VITA AH
TTC IIGGSSISISSVPWQVSLQYYG - - - - - - - - - - - SHICGGS IISAKYIVTA AH
ChBT IVNGEEAVPGSWPWQVSLQDKT - - - - - - - - - - - GFHF CGGS LINENWVVTAAH
ChPO IVNGEEALPHSWPWQVSLQDYT - - - - - - - - - - - GFHF CGGS LINENWVVTAAH
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cons ::.* . : : : : : : : . . : : .
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PSS CVEGM---NPSDLRILAGEHNFKKEDGTEQWQDVIDIIMHKDYVYSTLENDIAL
 TAAe CAASG---QTNLQVRIGSSQ--HASG-GQLIKVKKVNRHPKYDEVTTDYDFAL
 TAFi CTDGQ---VPSGITVVAGDHVLSSTTDGDEQVVGVASISEHPEYNSRTFYNDICV
 TAS CTDGL---DASSLSVRLGSSK--HASG-GTVVRVARIVEHPKYDGNTIDHDYCL
 TBT CYQ-----YHIQVRLGEYNIDVLEGGEQFIDASKIIRHPKYSSWTLNDILL
 TSS CYK-----SRVEVRLGEHNIKVTEGSEQFISSSRVIRHPNYSSYNIDNDIML
 TDM CLQSV---SASVLQVRAGSTYWSS---GGVVAKVSSFKNHEGYNANTMVNDIAV
 TLS1 CCQNL---PKYAKVVAGDHSQHSVSGFEQKIRVKSYVIHPDFGTSGVNNDICI
 TLS7 CCDSF---FPWEVQVVAGEHDLFSTSGDEQTIDVSDITYHEMFASHGTNYDVCL
 TNV CLKSS---NPSHLSIKAGSSTL--GGRGQVVDVHHVIRHEDYSRRESDYDIAL
 TPC CVQGEDFDFSPASLQIVAGDHTLYSAEGNEQKIAVSKIIQHEDYNGFISISNDISL
 TPV CVQGEDMNNPDYLVQVVAGEHNRDVEGNEQTVVLSKIIQHEDYNGFTISNDISL
 TPL CVYGDYDNP SGLNIVAGELDMSVNEGSEQTIAVSKII LHENLDYD LLDNDISL
 TRY1 CVYQK--MYITSDNLFVVFNTTNMKLPLDAANIGVEK-IFSANYNEDTKENDLAL
 TRY2 CLEEL--H-PIGVWAVAGEHRLDLVSGFEQELRAAQFVLHEEYDPDYLRNDIGI
 TRY3 CTENA--L-VGATRIAAGEHSLSTTSQFEQFSDVEMFVMHPNYDTVTLENDIVL
 TRY4A CVDGV--TDVGTLRVVAGEHSLTQTSGYEQIRSVLSYKMHESYNSNTFANDIAL
 TRY4B CTDGT---AVGSLIVAGEHSLINSNGNEQTRNVAAKHEHVSYSRRTQENDICL
 TRY5A CVANQ--A-TRNLQVVASEHSLGTISGEEQNRLVASILPNAAYDANTNERDIAI
 TRY5B CVDGV--TDLTIFRVVAGEHSLSVVSGLEQNRDVSGLMHPDYDTSTSSNDIAL
 TRY5K CVVGI--TDLTIFRVVAGEHSLSVVSGLEQNRDVSEYLMHPDYVQRTFFNDIAL
 TRY5C CVDGV--ADVSIFRVVAGEHDLFQVSGLEQNMVNNILMHPDYNKKTSENDIAL
 TRY5D CLDY---DNATIFRVVAGEHSFLNESGMEHNSNVDSYLMHPDYSPITLENDIAL
 TRY5E CVRGV--D-PASMLIVAGEHSLSQESGLEQNRVINTTVHEKYDFLTYENDISL
 TRY5F CVRGV--TDLTIFRVVAGEHSLRTDSGLEQNRVTRFVMHENVYKPLTFENDISL
 TRY5L CVRGI--TDLTIFRVVAGEHSLRNVSQLEQNRGVTRFVMHENFRPSTFENDICL
 TRY5G CVDGA---NIPNLRIVAGEHSLSVESGLEQNRVLVTRVATHPRYNSATYEDDISL
 TRY5I CVDGA---VIRALRVVAGEHSLNDKSGLEQNRDVAFYSMHPRYTASTWEDDIAL
 TRY5H GVVGI--MSLVEYRIVAGEHSLSVDSGLEQIRAVSSIVTHPNFDDITYEDDISL
 TRY5J CVDGA---NVARLRVVVGEHSQTQASGLEQISAVSSFTMHENYSSSTYENDISL
 TRY5M CVSGI--D-DTSLRVVAGEHSLSTDSGYEQDAFPVSVFVHEEYDTHFKNDIAL
 TTC CTDGL--T-AAQLSIRAGTSSRGS---GGQVSSVARIYQHSSYNSRTIDYDISI
 ChBT CGV-----TTSDVVVAGEFDQGSSEKIQLKIAKVFKNKYNSLTINNDITL
 ChPO CNV-----RTSHRVILGEHDRSSSAEDIQVMKVGKVFKHPRYNGYTINNDILL

cons  *

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PSS      LKLA-EPLDL---TP TAVGSIICLPSQNNQ--EFSGHCIVTGWGSVR--EGG--
TAAe     LELE-ETVTF---S-DSCAPVKLPQKDTPVN--EGTCLQVSGWGNTQ--NPS--
TAFi     LKLL-NSIII---G-GNVQPVGLPFPNAEVD--EGVMATVSGWGTTT--AGG--
TAS      LELE-SELTF---S-NAVQPIALPEQDEPV--VDGTMATVSGWGNTQ--SAT--
TBT      IKLS-TPAVI---NA-RVSTLLLPSACA---SAGTECLISGWGNTL--SSGV--
TSS      IKLS-KPATL---NT-YVQPVALPTSACA---PAGTMCTVSGWGNTM-S-ST--
TDM      IRLS-SSLSF---S-SSIKAISLATY---NPANGASAAVSGWGTQS--SGSS-
TLS1     LHLE-NPLEL---ND-KVAKIAMPDQDQEFEG---EAVISGWGTTT--SGA--
TLS7     LKLL-SSLHF---N-EKVKPIALPEKDQEF--IG-DVVVSGWGTTT--SSGP-
TNV      LQLE-SPLAL---G-SKIQPIELAEAAADYYS--TGSKASVTGWGVVE--SSG--
TPC      LQFA-SPLTF---N-SFVGPIALPAQGG---VASGDCTCTGWGTTT--EGG--
TPV      LQLS-QPLSF---N-DFVAPIALPEAGH---AASGDCIVSGWGTTT--EGG--
TPL      LKLA-TPLTF---N-NNVAPIALPAQGH---TATG-NVIVTGWGTTT--EGR--
TRY1     LKLL-GSIYN---VTESFIAVSLPSES---FQPSG-DCVVSGWGYQR-ANAG--
TRY2     IRLN-GAFVF---N-SFLKQVKLPRSGYFT--FPDTAVTVAGWGTTK--EGG--
TRY3     IKLI-TPLDF---SSGKVSPISLPAMQE--TAAGTNVTVTWGNLE-FNNP--
TRY4A    LKLS-SPLDY---STGKVGAINLPAQGATIE--TGTTCLVTGWGTTIAGGGG--
TRY4B    LELS-SPLTL---N-SVGVVVRIPAQGAQ--TAVGTNCVVSGWGTTT--SGGS-
TRY5A    VKLS-TPLVY---T-SKVAPVVLPPPLSELDPAGLDVTVIAGWGDTV-EVNG--
TRY5B    IYLA-SPLDL---SVPSAKAVNMPPPTSEFDPPAGTITTVSGWGTTT--SGG--
TRY5K    IYLA-SPLDL---SVPSAKAVNMPPPTSEFDPPAGTITTVSGWGRIS--TGG--
TRY5C    IYLA-APLDL---SVPSAKPINMPPATWEFDPPAGIVATVSGWGTTT--SGG--
TRY5D    IYLS-GPLNVLPFN-EAVQPINLAL-TGTADPEPGLSVTVAGWGTTT--ASG--
TRY5E    LFLE-SPLDL---SVPAARPILLPPPTTEEFDPPSGLLLTVSGWGTTT--LGG--
TRY5F    LFLD-APLDL---SVPEAQPVLLPPPTSELDPAGTIVTVSGWGTTT--SGG--
TRY5L    LFLD-APLDL---SVPEAKPVLLPPPTSELDPAGTIVTVSGWGTTT--YGG--
TRY5G    IFLD-SPLDL---SVPSAKAIALPPSTSELDPAGTVVTCVSGWGTTT--SGG--
TRY5I    IVLT-EPFDL---SVPSAKPVNLPPPTSEFDAPAGTVFTVSGWGTTT--YGGI-
TRY5H    IFLT-EPLDL---SVPSAKPIALPGPTAEFDPPAGFRVNVSGWGTTT--SDG--
TRY5J    IFVA-TPFDL---SVASARPVNLPAPTSEFDPPAGTITTVSGWGTTT--EGG--
TRY5M    IFMNQAPLDL---SVPSAKPINLPEPTSQYDPPAGTHVNVSGWGFTN--SASWS
TTC      LELS-SSLTL---G-SNVSPVSLPSSSTSWN--AGTSVLVTGWGTTT--EGSS-
ChBT     LKLS-TAASF---SQ-TVSAVCLPSASDDF--AAGTTCVTTGWGLTR-YTNA--
ChPO     IKLA-APAQM---NM-RVSPVCVAETSDF--AGGMKCVTSGWGLTR-HNAP--

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cons     : .      : : .      : * * *

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PSS      --NSPNILQKVSVPPLMTDEECSEY-Y-----NIVDTMLCAGY-AEGGKDA
TAAe     --ESSEVLRAAYVPAVSQKECHKAYLSF-----GGVTDRMVCAGF-KEGGKDS
TAFi     --SLSDVLLAVNVPVISDAEERGA-YGET-----DVADSMICAGDLANGGIDS
TAS      --ESNAVLRAANVPTVNQQECEKAYGQT-----PGITDQMLCAGY-QQGGKDA
TBT      --NYPDLLQCLVAPLLSHADCEAS-YPG-----QITNNMICAGF-LEGGKDS
TSS      --ADSNKLQCLNIPILSYSDCNNS-YPG-----MITNAMFCAGY-LEGGKDS
TDM      --SIPSQLQYVNVNIVSQQCASSTYGYG-----SQIRNTMICA--ASGKDA
TLS1     --PPSFLLRWAKVNIVSKAECQNA-YGS-----RIDDSMICAAA--PGKDS
TLS7     --ASPVLKAVTVQVVSDEDCSDA-YYG-----SIDETMICA--PGKDS
TNV      --ELSNYLREVSVPPLISNSECSRLLYQQR-----RITERMLCAGYVGRGGKDA
TPC      --YSSDALLKVTMPIVSDADCRAS-YGES-----DIDDSMICAGV-PQGGKDA
TPV      --STPSVLQKVSVPPIVSDDECRDA-YGQN-----DIDDSMICAGM-PEGGKDS
TPL      --NTPDVLQKVTIPLVSDAECRSD-YGAD-----EIFDSMICAGV-PEGGKDS
TRY1     --TTPDHLMAANVTILADEDCQNR-FSP-----HYKIYPGMICAGG-KE--KDA
TRY2     --NLSNVLLKTTVPVVSDEDCRLI-YGAG-----LIVDSMLCAGY-TSGGYDS
TRY3     --NRPDVLNKGVIPTVSDLECRRS-YGPI-----DMFDSFICAGV-PEGGLDS
TRY4A    --SVSDVLRKAAVPIVSNSDCNMS-YGGN-----SILPSMLCAGF-VAGGIDS
TRY4B    --TIPDILRKVTVPVVSDDTCRGS-YGTN-----AITDSMICAGF-RLGGADS
TRY5A    --TSSDVLISATVPVIVADDVCNLA-YGGNEN--STIVFPDMMCTG--NGNADA
TRY5B    --SISNVLLSVDVPIVSDSDCNAA-YAGVFD--PNPIFPSMLCAGG-PPGGVDS
TRY5K    --SISNVLLSVDVPIVSDSDCNAA-YAGVFD--PNPIFPSMLCAGA-PAGGVDS
TRY5C    --SISNVLLSVDIPIISDDACNAI-YTDESEPKPKAIYESMLCAGG-PNGNVDS
TRY5D    --DRSDVLLSVDIPVVSDEDCNAA-YSGEYN--TDPVKPSMMCAGG-APGGLDA
TRY5E    --VISDQLRSVDVPVVDATCNYA-YGGSTQ--NPDVFPSPMICAGDMSAVQTFQ
TRY5F    --VISDQLRSVDVPVVDVDDVCNRA-YGGTAA--SPQVYPSMLCAGDISNGGIDS
TRY5L    --AASDELRSVDVPVVDVDDTDCNRA-YGGTAA--NPEVFPSPMMCAGDTSNGGIDS
TRY5G    --SISDVLRSDVPIVSDADCDAA-YGGTAS--SPSVYPSMICAGDTTNGGIDS
TRY5I    --LVSDVLLSVDVPVVDVDCDAY-YGGTSQ--KPEVYPSMLCAGNTTDGGIDA
TRY5H    --DVSDVLRSLVVPVVPDFDCDAA-YGGDGV--YIAVFPSMVCAGDVTSTRIPY
TRY5J    --SVSDTLLSVDIPIVISDADCNTA-YGGN-----AVFSSMMCAGGP-NGGIDS
TRY5M    DDRLSDLLRSVNISVVSDDQVCDKA-YGGDSE--NRIVLPSMMCAGDMKKGGGLDS
TTC      --SLPSALQGVTVQIVSQSTCSSA-YGSGS-----ITGRMLCAG-VTNGGKDA
ChBT     --NTPDRLQQASLPLLSNTNCKKY-WGT-----KIKDAMICAGA--SGVSS
ChPO     --DTPALLQQAALPLLTNDDCRRY-WGN-----KISNLMICAGA--SGASS

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cons      * : * : : : : . * : .

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PSS	CQGDSGGPLVC	---	PNGDGT	Y	SLAGIVSWG	--	IGCAQPRNPGVY	TQVSKFLDW		
TAAe	CQGDSGGPLVH	---	DN	-	TLVGVVSWG	--	YGCAQAGYPGVY	ARVASVRDW		
TAFi	CQGDSGGPLYM	---	GS	---	TIIGIVSWG	--	YGCAAYAGYPGVY	TQVSYVVSF		
TAS	CQGDSGGPLVA	---	DG	-	KLIGVSWG	--	FGCAQAGYPGVY	SRVASVREW		
TBT	CQGDSGGPVAC	---	NG	-	QLQGIVSWG	--	YGCAQKGGKPGVY	TKVCNYVDW		
TSS	CQGDSGGPVVC	---	NG	-	ELQGVVSWG	--	YGCAEPGNPGVY	AKVCIFNDW		
TDM	CQGDSGGPLVS	---	G	---	VLVGVVSWG	--	YGCAYSNYPGVY	ADVAVLRSW		
TLS1	CQGDSGGPMVC	---	DG	-	VQCGIVSWG	--	YGCADPKYPGVY	AKLSKFMDW		
TLS7	CQGDSGGPLAQ	---	DG	-	TLVGIIVSWG	--	YGCAAPGYPGVY	GKVSKFIDW		
TNV	CQGDSGGPLVQ	---	DG	-	KLIGIVSWG	--	FGCAEPNYPGVY	TRVTALRSW		
TPC	CQGDSGGPLAC	---	SDTGSP	-	YLAGIVSWG	--	YGCARPNYPGVY	CEVAYVVDW		
TPV	CQGDSGGPLAC	---	SDTGST	-	YLVGIIVSWG	--	YGCARPNYPGVY	AEVSYHVDW		
TPL	CQGDSGGPLAA	---	SDTGST	-	YLAGIVSWG	--	YGCARAGYPGVY	TEVSYHVDW		
TRY1	CQGDSGGPLVC	KSS	-	TGQN	-	VLTGIVSWG	--	IGCATPTIPGVY	TKVAKYMDW	
TRY2	CQGDSGGQLML	---	G	---	DK	-	TLVGIIVSWG	--	KGCGQPDYPGVY	TEVSAYIGW
TRY3	CNGDSGGPLFT	---	SDPQ	--	QLIGIVSWG	--	KDCALPGYYGVY	TEVSYFSDW		
TRY4A	CQGDSGGPLVT	---	LN	--	PN	-	VLVGVVSWG	--	NGCANPGYPGVY	TRVASFTNW
TRY4B	CQGDSGGPLV	---	DEGTN	-	LLIGVSWG	--	IGCADAGYYGVY	TEVSYFHNW		
TRY5A	CNRDLGGPLFT	---	GTGAEA	-	VIHGIIISWG	--	IGCGASSYPDAYT	QVSYFLDW		
TRY5B	CQGDSGGPLFT	---	GTGADA	-	VQHGIIVSWG	--	IGCAQAAYPGVY	TQVSYFLDW		
TRY5K	CQGDSGGPLFT	---	GTGADA	-	VQHGIIVSFGPS	--	AGCALAEYPGVY	TQVSYFLDW		
TRY5C	CQGDSGGPFFI	---	GTGTNA	-	IQLGVVSWG	--	RGCATGHYPGVY	TQISYFLDW		
TRY5D	CQGDSGGPLFV	LPADGNVANV	-	QQLGIVSWG	--	RGCGLADYPGVY	TQLSYYLEW			
TRY5E	VELISGGPLFL	LPLDGNVTEA	-	RQIGVSWG	--	RGCAISAFPGVY	TQVSYFLDW			
TRY5F	CQGDSGGPLFT	---	GTGASA	-	VQHGIIVSWG	--	QGCALAGYPGVY	TQVSFFLDW		
TRY5L	CQGDSGGPLFT	---	GTGASA	-	VQHGIIVSFG	--	QGCALAAYPGVY	TQVSFFLDW		
TRY5G	CQGDSGGPLFT	---	GTGETA	-	VQHGIIVSWG	--	QGCALARFPGVY	TQVSYFLDW		
TRY5I	CQGDSGGPLFS	---	GSGETA	-	VQHGIIVSWG	--	KSCAEPQWPGVY	TQVSYFVEW		
TRY5H	CQGDSGGPLFT	---	GTGETA	-	VQHGIIVSWG	--	QSCTYSQFPGVY	TQVSYFLDW		
TRY5J	CQGDSGGPLFT	---	GTGETA	-	VQHGIIVSWG	--	QGCAQAAYPGVY	TQVSYFLDW		
TRY5M	CQGDSGGPLFT	---	GSGETA	-	VLYGIIVSWG	--	EGCALASYPGIYT	TQVSYFLDW		
TTC	CQGDSGGPLVV	---	GN	---	VLAGIVSWG	--	AGCGRPSYPGVY	SNVPALRSF		
ChBT	CMGDSGGPLVC	---	KKNGAW	-	TLVGIIVSWG	--	SSTCSTSTPGVY	ARVTALVNW		
ChPO	CMGDSGGPLVC	---	QKAGAW	-	TLVGIIVSWG	--	SGTCTPTMPGVY	ARVTELRAW		

cons * * . * : : : * . . : : :


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PSS      IRNTNIDGSNVIEFI-----I
TAAe     VKEVSG-----L
TAFi     IKSV-----
TAS      VRENSG-----V
TBT      IQETIAAN-----S
TSS      LTSTMASY-----
TDM      VVSTAN-----SI
TLS1     VKENV-----
TLS7     IVEHK-----
TNV      ISEIAG-----L
TPC      VLANS-----
TPV      IKANA-----
TPL      IKANAV-----
TRY1     INKIMA-----DN
TRY2     INMKLSTAEA-----SNNRNI-----S
TRY3     IAATIAAADA-----H
TRY4A    IKTNAV-----
TRY4B    IVSFAG-----
TRY5A    IAANRG-----
TRY5B    IMANRG-----
TRY5K    IAANKQ-----
TRY5C    INENLH-----
TRY5D    INQNMV-----PA
TRY5E    IAANRV-----
TRY5F    IAANRV-----
TRY5L    IATNRV-----
TRY5G    IAAARG-----
TRY5I    IALAMQ-----
TRY5H    IAANRR-----
TRY5J    IAANKI-----
TRY5M    IAANQRVYSNYFNWPHLRHLSTRPMPDSKHVRTVSTS
TTC      IQQTTG-----I
ChBT     VQQTLAA-----N
ChPO     MDQTIAN-----N

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cons     :

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