



## Test Alignment

SPS		
1dm0_A	...KEFTLDFSTAKTYVDSLNVIRSAIGTPLQTISSGGTS	37
1mrj_	..DVSFRLSGATSSSYGVFISNLRKALPNE...RKLYDIP	35
1lln_A	..NIVFDVENATPETYSNFLTSLREAVXDX..KLTCHGM.	35
1qi7_A	VTSITLDLVNPTAGQYSSFVDKIRNNVKDP..NLKYGGTD	38
consensus	* *** ***** ** * ***** ** ***	

TC



SPS		
1dm0_A	LLMT...DDNLFVAVDVRGITDPEEGRFNNLRLLIVERNNLYV	74
1mrj_	LLRSSLPGSQRYAL....IHLTNYADETISVAIDVTNVYI	71
1lln_A	IMATTLTEQPXYVL....VDLXFGS.GTFTLAIRRGNLYL	70
1qi7_A	IAVIGPPSKEKFLR....INFQSSR.GTVSLGLKRDNLYV	73
consensus	* * * * * * * * * * * * * * * * * * * *	


TC



SPS		
1dm0_A	TGFVNRTNN.....VFYRFA.DFSHVTFPGTTAV.....T	103
1mrj_	MGYRAGDTS.....YFFNEASATEAAKYVFKDAM..RKVT	104
1lln_A	EGYSDIYNGKCRYRIFXDSESDAQETVCPGDKSKPGTQNN	110
1qi7_A	VAYLAMDN TNVNRAYYFKSEITSANELTALFPEATTAQKA	113
consensus	** * * * * * * * * * * * * * * * * * *	

TC




SPS  138  
1dm0\_A LSGDSSYTTLQRVA.....GISRTGMQINRHSLTTSYLDL 138  
1mrj\_ LPYSGNYERLQTAA.....GKIRENIPLGLPALDSAITTL 139  
1lln\_A IPYEXSYKGMESK.....GGARTKLGLGXITLKSRMGXI 144  
1qi7\_A LEYTEDYQSI EKNAQITQGDKSRKELGLGIDL L LTFMEAV 153  
consensus \*\*\* \*\* \* \* \*\*\*\*\* \*\* \* \*\*

TC 

SPS  175  
1dm0\_A MSHSGT...SLTQSVARAMLRFVTVTAEALRFRQIQRGFR 175  
1mrj\_ FYYNAN.....SAASALMVLIQSTSEAARYKFIEQQIG 172  
1lln\_A YGKDATDQKQYQKNEAEFLLIAVQMVTEASRFXYIENXVX 184  
1qi7\_A .....NKKARVVKNEARFLLIAIQMTAEVARFRYIQNLVT 188  
consensus \* \* \*\*\* \*\*\*\*\* \*\* \*\*\*\*

TC 

SPS  212  
1dm0\_A TTLDS...YVMTAEDVDLTLNWGRLSVLPDYHGQDSVRV 212  
1mrj\_ KRVDKT..FLPSLAISLENSWSALSQI.QIASTNNGQF 209  
1lln\_A AKFDDANGYQPDPAISLEKNWDSVSXVIAKVGTSGDSTV 224  
1qi7\_A KNFPNK..FDS DNKVIQFEVSWRKISTAI..YGDAKNGVF 224  
consensus \* \*\* \*\* \* \*\*\*\*\* \* \*\*\*\*\* \*\* \*\*

TC 


SPS		
1dm0_A	GRISFGSINAI <b>L</b> GSVALILNCFPSMCPA <b>DGRV</b> <b>R</b> G <b>I</b> T <b>H</b> NKI	252
1mrj_	.....ES <b>F</b> V <b>V</b> <b>L</b> I.....NAQNQR <b>V</b> TITNV	228
1lln_A	.....TL <b>P</b> G <b>D</b> <b>L</b> X..... <b>D</b> EN <b>N</b> K <b>P</b> W <b>T</b> ....	239
1qi7_A	.....NKDY <b>D</b> FG..... <b>F</b> G <b>K</b> <b>V</b> <b>R</b> <b>Q</b> <b>V</b> <b>K</b> ....	239
consensus	* * *	** * **

TC

SPS		
1dm0_A	LWD..S <b>S</b> T <b>L</b> <b>G</b> A <b>I</b> <b>L</b> M.....	264
1mrj_	DAGVV <b>T</b> S <b>N</b> I <b>A</b> <b>L</b> <b>L</b> <b>L</b> NRNNMA	247
1lln_A	..... <b>T</b> <b>A</b> <b>T</b> <b>M</b> <b>N</b> <b>D</b> <b>L</b> <b>K</b> .....	247
1qi7_A	.....DL <b>Q</b> <b>M</b> <b>G</b> <b>L</b> <b>L</b> MYLGKPK	253
consensus	*****	


TC

## Reference Alignment

SPS		
1dm0_A	...KEFTLDFSTAKTYVDSLNVIRSAIGTPLQTISSGGTS	37
1mrj_	..DVSFRLSGATSSSYGVFISNLRKALPNERKLY..DIPL	36
1qi7_A	VTSITLDLVNPTAGQYSSFVDKIRNMVKDPNLKY..GGTD	38
1lln_A	..NIVFDVENATPETYSNFLTSLREAVXDXXKLTC..HGMI	36
consensus	* *** ***** ** * ***** *** **	


TC



SPS		
1dm0_A	LLMI...DDNLFQVDVRGIDPEEGRFNNLRIVERNNLY	73
1mrj_	LRSS.LPGSQRYAL.....IHLTNYADETISVAIDVTNVY	70
1qi7_A	IAVIGPPSKEKFLR.....INF.QSSRGTVSLGLKRDNL	72
1lln_A	MATT.LTEQPXYVL.....VDL.XFGSGTFTLAIRRGNL	69
consensus	** * ** * * * * * * * * * * * *	


TC




SPS		
1dm0_A	VTGFEVNRNTNV.....FYRFA.DFSHVTFPGT.....TAV	102
1mrj_	IMGYRAGDT.....SYFFNEASATEAAKYVFK..DAMRKV	103
1qi7_A	VVAYLAMDNNTNVNRAFYFKSEITSAELTALFPEATTANQK	112
1lln_A	LEGYSDIYNGKCRYRIFXDSESDAQETVCPGDKSKPGTQN	109
consensus	* ** * ** * * * * * * * *	

TC



SPS  137  
1dm0\_A T L S G D S S Y T T L Q R V A G . . . . I S R T G M Q I N R H S L T T S Y L D 137  
1mrj\_ T L P Y S G N Y E R L Q T A . . . . A G K I R E N I P L G L P A L D S A I T T 138  
1qi7\_A A L E Y T E D Y Q S I E K N A Q I T Q G D K S R K E L G L G I D L L L T F M E . 151  
1lln\_A N I P Y E X S Y K G M E S K . . . . . G G A R T K L G L G X I T L K S R M G X 143  
consensus \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*


TC 

SPS  174  
1dm0\_A L M . . S H S G T S L T Q S V A R A M L R F V T V T A E A L R F R Q I Q R G F 174  
1mrj\_ L F Y Y N A N . . . . . S A A S A L M V L I Q S T S E A A R Y K F I E Q Q I 171  
1qi7\_A . . . . A V N K K A R V V K N E A R F L L I A I Q M T A E V A R F R Y I Q N L V 187  
1lln\_A I Y G K D A T D Q K Q Y Q K N E A E F L L I A V Q M V T E A S R F X Y I E N X V 183  
consensus \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

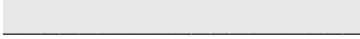
TC 

SPS  210  
1dm0\_A R T T L D S . . . Y V M T A E D V D L T L N W G R L S S V L P D Y H G Q D S V . 210  
1mrj\_ G K R V D K . . T F L P S L A I I S L E N S W S A L S K Q I Q I A S T N N G Q F 209  
1qi7\_A T K N F P N . . K F D S D N K V I Q F E V S W R K I S T A I Y G D A K N . G V F 224  
1lln\_A X A K F D D A N G Y Q P D P X A I S L E K N W D S V S X V I A K V G T S . G D S 222  
consensus \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

TC 

SPS		
1dm0_A	...RVGRISFGS.....INAI.....LGSVALI <del>LN</del> CF	234
1mrj_	ESPVV..LINAQ <del>N</del> QRV...TITNVDA <del>G</del> VVTSNI <del>ALLN</del> .R	243
1qi7_A	NKD <del>YD</del> ..FG <del>F</del> GK.....VRQVK <del>DL</del> QMGL.....LMYL <del>G</del> .K	251
1lln_A	TVTL <del>P</del> <del>G</del> <del>DL</del> <del>X</del> DEN <del>N</del> KPWTTAT <del>M</del> <del>N</del> <del>DL</del> K.....	247
consensus	** **** *	

TC

SPS		
1dm0_A	<del>P</del> <del>S</del> <del>M</del> CPADGRVRGITHNKILWDSSTLGAILM	264
1mrj_	NN <del>M</del> A.....	247
1qi7_A	<del>P</del> <del>K</del> .....	253
1lln_A	.....	247
consensus	* *	

TC