

Reference sequence (1): NP_003108.2
 Identities normalised by aligned length.
 Colored by: identity

	cov	pid	1	80
1 NP_003108.2	100.0%	100.0%	MGVLRKFKHIFFRSFKSSGVSQIVF-TF	LLIPCLLTNFRAPPVIVNVPFLWANNAPSEFCGLG
2 XP_003318802.2	100.0%	96.3%	MGVLRKFKHIFFRSFKSSGVSQIVF-TF	LLIPCLLTNFRAPPVIVNVPFLWANNAPSEFCGLG
3 XP_003261317.2	100.0%	93.3%	MGVLRKFKHIFFRSFKSSGVSQIVF-TF	LLIPCLLTNFRAPPVIVNVPFLWANNAPSEFCGLG
4 XP_001086882.2	100.0%	86.9%	MGVLRKFKHIFFRSFKSSGVSQIVF-TF	LLIPCLLTNFRAPPVIVNVPFLWANNAPSEFCGLG
5 NP_001076141.2	99.4%	67.1%	MGVLRKFKHIFFRSFKSSGVSQIVF-TF	LLIPCLLTNFRAPPVIVNVPFLWANNAPSEFCGLG
6 XP_002919069.1	94.7%	66.8%	MAVLRFRQIRFFRSFVGSRGATPVVLT-F	LLIPCLLTQEFRAPPVIVNVPFLWANNAPTELCAQ
7 NP_999176.1	94.5%	65.7%	MGVLRQRLQHSFRSFFVPSGAPQVVF-TF	LLIPCLLADFRASPIIPNTTFLWANNAPTESCAK
8 XP_002686960.3	94.1%	65.8%	--MLRHQHSFRNFVGSNGAPQAVF-TF	LLVPCCLALMFTAPPLIPNIPFLWANNAPTNHCAE
9 NP_001008413.3	99.6%	61.1%	MRMLRRRHHSFRSFFAGSSGTPQAVF-TF	LLLPCLLADFRAPPLISNTSFLWANNAPVERCVNR
10 XP_003502178.1	94.5%	62.1%	MRVLCVKHSFSGSFLESNGAPQTVL-VF	LLLPCLLTGDFRAPPLIPNVPFLWANNAPTESCLT
11 NP_001166492.1	96.4%	59.2%	MGAFTRFKHSFFGSFVCSGLQTVF-IF	LLIPCLLADFRAPPVIVNVPFLWANNAPTEFCIG
12 NP_001019492.1	94.5%	61.1%	MRVLCVKHSFSGSLLSSGLPQTLV-VF	LLIRCLLTVDFRAPPVIVNVPFLCANNAPTESCAT
13 XP_001507937.2	95.8%	57.3%	---RLPHLSSGSWAVCCQASWVAV-VL	QLLPNCMALDIOAPPMPNLPFLSANNAPTELCAQ
14 NP_001073344.1	94.9%	57.8%	MGELRFKHLFWGSFVSGGTFQTVL-IF	LLIPCLLTVDYRQAPILSNNTTFLWANNAPTEFCV
15 XP_003502177.1	94.9%	55.0%	MGGLPLKHLFWGSFVSRATFQTVLIIF	LLIPCLLTVDYRGGPLLPSEILWANNAPTEACIG
16 XP_002190553.4	90.1%	54.0%	-----ASGVVF-AT	LLVSCSSLNIRARPLLSNSPFLSIANNAPTELCFE
17 XP_002932242.3	91.9%	45.6%	MERVNCEHTLYKLL-----CITLCS	FLIHTQSQMDMKAPTNGP-ANFMAIANNAPTELCMR
18 NP_001082194.1	90.9%	45.4%	---FQMLCKKCI-----CITLIF	CFIITSQSQMDIKAPTNGN-SNFMAIANNAPTELCLO
19 XP_002919077.1	90.5%	43.8%	MKVLSEGQLRFQVVPQIHLTSC--LVVIF	IILKSISSKPARLPIYQRKPFIAANNAPTDQCLI
20 XP_002712114.1	82.6%	47.0%	-----	PIYQRKPFIAANNAPTDQCLM
21 XP_532444.4	86.1%	44.6%	-----LLIIF	FILKSISSKPARLPIYQRKPFIAANNAPTDQCLI
22 XP_002818436.2	82.6%	46.5%	-----	PIYQRKPFIAANNAPTDQCLI
23 NP_084124.1	81.2%	45.1%	-----	PVYQRKPFIAANNAPTDCLCI
24 XP_003134772.2	86.1%	43.9%	-----LLIIF	FILKSISSKPARLPIYQRKPFIAANNAPTDQCLI
25 NP_036401.2	82.6%	46.5%	-----	PIYQRKPFIAANNAPTDQCLI
26 XP_003261316.2	90.5%	43.8%	MKVLSEGHLRLCVVQPVHLTSSW--LLIIF	FILKSISSKPAQLPIYQRKPFIAANNAPTDQCLI
27 XP_003407292.1	86.5%	44.4%	-----SSW--LLIIF	FILKSISSKPARLPIYQRKPFIAANNAPTDQCLI
28 XP_003586042.1	86.1%	43.9%	-----LFIL	FILKSISSKPARLPIYQRKPFIAANNAPTDQCLI
29 NP_001094250.1	87.1%	40.5%	-----RCVVQPVHLTSSG--LLIIF	FILKSISSKPARLPIYQRKPFIAANNAPTDCLCI
30 XP_003221368.2	82.4%	45.7%	-----	PISRRKPFIAANNAPTDHCSI
31 XP_003475093.1	88.3%	41.2%	-----IQSIHLTPW--LLVIF	LSLKSISSKPARLPIYQRKPFIAANNAPTDQCLM
32 NP_001090796.1	79.6%	45.4%	-----	PFVQNKPFVAVANNAPTEQCKQ
33 XP_003221369.1	80.0%	44.6%	-----	PLFFNKAFVAVANNAPTEQCR
34 XP_003449274.1	83.2%	40.1%	-----	PLVGRKPFIAANNAPLDLCTF
35 NP_001074140.1	79.8%	44.6%	-----	PLVHRPFVAVANNAPTESCR
36 XP_003217669.1	81.6%	43.6%	-----	PIFTRRPPIVANNAPSQDCQP
37 XP_001507903.3	83.8%	41.8%	-----LSW--LLIS	FLLELTSSKPAQHPHFQKPFVAVANNAPTDQCLF
38 XP_003449275.2	80.0%	44.0%	-----	PPLTFHKKPFVAVANNAPTESCR
39 XP_001378617.3	80.2%	44.1%	-----	APPVIFTRRPFLVANNAPTDQDCWP
40 XP_003210019.2	82.0%	44.5%	-----	APLLTRRPFLVANNAPTDQCKP
41 XP_414258.3	84.6%	42.5%	-----LVPA	VLAVLARQSPEKPSAPLLTRRPFLVANNAPTDQCKP
42 NP_001080777.1	79.8%	44.9%	-----	PVFTRRPPIVANNAPTDQDCPP
43 NP_001119986.1	83.0%	42.0%	-----LSLPA--FLWFLGAAANGQLSDSWLNKPTFR	PVFTRRPPIVANNAPTDQDCPP
44 XP_003221370.3	82.8%	41.7%	-----	FMLVDGSLTAMPTRAPFLFSKKAFFVAVANNAPTEQCR
45 XP_003448364.1	81.4%	40.9%	-----LLIV--PLWDCL	FALGLKPTRWPLYSRKLPLVANNAPTEDCAP
46 XP_002189602.4	78.8%	43.7%	-----	PVLVNRPVFTIANNIPTERCAE
47 NP_001074154.2	79.4%	42.8%	-----	PFVLLANNAPISKCHQ
48 XP_003448436.2	83.6%	39.9%	-----VL--LHL	ILTSLVSGHYPNP-FSKVPFLTVANNAPSANCL
49 XP_002813763.3	82.4%	37.9%	-----LA--VAW	AMELKPTAPPVIFTRRPVAVANNAPTDQDCGP
50 XP_002935681.1	81.2%	42.2%	-----YTF	LSGLLGWLAAGTDPVLKGRPFASVANNAPTSPLD
51 XP_001168599.1	82.4%	37.9%	-----LA--VAW	AMELKPTAPPVIFTRRPVAVANNAPTDQDCGP
52 XP_687640.2	86.7%	37.4%	-----HLSGTTTRTQRASSW--LQVLLM--LFWTCL	KAQQLKNTRWPLYSKGLPLVANNAPTEDCRP
53 NP_003764.3	82.4%	37.7%	-----LA--VSW	AMELKPTAPPVIFTRRPVAVANNAPTDQDCGP
54 XP_003476739.1	83.2%	37.1%	-----AGLGPI--V--TLALVLP--VAW	AMELKPTGPPVIFTRRPVAVANNAPTDQDCGP
55 XP_003257153.1	82.4%	37.7%	-----LA--VAW	AMELKPTAPPVIFTRRPVAVANNAPTDQDCGP
56 XP_002758427.1	81.6%	38.1%	-----LV--VAW	AMELKPTAPPVIFTRRPVAVANNAPTDQDCGP
57 XP_001102414.2	80.8%	40.2%	-----	PPLVNRPFATVANNANTQWCLE
58 NP_742037.2	80.2%	40.6%	-----	APPVIFTRRPVAVANNAPTEQCAP
59 NP_999605.1	81.6%	38.5%	-----LA--VAW	ATELKPTAPPVIFTRRPVAVANNAPTDQDCGP
60 NP_001009754.1	81.6%	38.5%	-----LV--VAW	ATELKPTAPPVIFTRRPVAVANNAPTDQDCGP
61 NP_083196.2	82.4%	39.5%	-----VLF	VLLVAPAAKPPVVKDHPFNVFNAAPTLFCKD
62 NP_001019491.1	79.8%	41.3%	-----	PPVVKDHPFNVFNAAPTLFCKD
63 NP_776772.1	81.6%	38.3%	-----LV--VAW	ATELKPTAPPVIFTRRPVAVANNAPTDQDCGP
64 NP_149349.2	82.0%	39.0%	-----LLP--ICA	FLTLTLDMAQGFRLPLVNRPFVAVANNANTQWCLE
65 NP_001035086.1	79.4%	40.6%	-----	P-LIKLPIFISANNAPTERCKS
66 XP_003502176.1	85.3%	37.9%	-----	PPVVKDHPFNVFNAAPTFEAOE
67 XP_003257149.1	80.8%	39.5%	-----	PPLVNRPFVAVANNANTQWCLE
68 XP_002813766.6	80.8%	40.0%	-----	PPLVNRPFVAVANNANTQWCLE
69 NP_001017941.1	82.0%	38.5%	-----LLP--VCT	FLNLLSMTQGSRDVVPVNRPFVAVANNANTQWCKM

70	XP_002920567.1	79.0%	40.7%	-----PMPVNPFFITTIWNANTQWCL-E
71	XP_003476738.1	79.0%	40.9%	-----PVVNPFFITVWNADTQRCLK-
72	NP_999606.1	82.0%	38.8%	-----LLP---ICT-----FLNLLSVAQGSRDVVLNRPFFITTIWNANTQWCLK-
73	XP_002713406.3	78.6%	40.0%	-----TVPKPFITVWNADTQWCL-E
74	XP_003500449.1	79.2%	40.4%	-----TVFNKPFITIANADTYWCLK-
75	XP_001509131.1	79.0%	38.2%	-----PVVNHFFITTIWNADTHTCLE-
76	XP_001139800.4	79.8%	38.6%	-----PPVTKSQPFNIFNAAPTMYCMP-
77	NP_032343.3	78.8%	39.6%	-----VVSNRPFFITVWNGDTHWCLT-
78	NP_997499.2	80.4%	38.3%	-----MVSNRPFFITVWNADTHWCLK-
79	XP_001168796.1	77.8%	35.4%	-----LLP---ICA-----FLTLDDMAQGRGFLNRPFFITVWNANTQWCL-E
80	NP_997482.2	76.8%	36.7%	-----ITQLGL--TLVV-----GLTLCLVHVQALLQVPELFFSVLWNPVSARCKT-
81	NP_001193181.1	77.8%	37.4%	-----PARPFSVLWNPVSARCKN-
82	NP_001186958.1	79.4%	35.4%	-----LVL-----GVALCLCGQPPLQVPERPFSVLWNPVSAHCEA-
83	NP_999604.1	71.9%	39.4%	-----PERPFCVLWNPVSARCKA-
84	XP_001493753.3	71.9%	39.4%	-----RECFFSVLWNPVSAHKA-
85	NP_001121765.1	76.4%	38.0%	-----VIGRRGFQVIWNPVTARQQR-
86	NP_821139.2	72.1%	38.6%	-----VPEHPFSVWNPVSARCKA-
87	XP_002128103.1	72.9%	35.4%	-----MSF--SYVFLALGILGSVCHSQSLQS-YLTTSLKDNIWQPLPDRPFIGVWNPVSNRCLT-
88	XP_003642042.3	69.7%	37.2%	-----PFAVLWNIPSSRCQR-
consensus/100%			h..hshs...C...
consensus/90%			h.t.sj.hhssot.Ch..
consensus/80%			Phh.tpFhhhWspPop.Ch..
consensus/70%			PlhspplfssWNPJp.Ch..

	cov	pid	81	1	160
1	NP_003108.2	100.0%	100.0%	KFDEPLD---MS-LFSFIGSPRIWATGQVITFYVDRLGYPYIDSITGVTNNGGIPQKISLDQHDKAKKIDIFYMPV-	
2	XP_003318802.2	100.0%	96.3%	KFDEPLD---MS-LFSFIGSPRIWATGQVITFYVDRLGYPYIDSITGVTNNGGIPQKISLDQHDKAKKIDIFYMPV-	
3	XP_003261317.2	100.0%	93.3%	KFDEPLD---MS-LFSLTGSPRIWATGQVITFYVDRLGYPYIDSITGVTNNGGIPQKISLDQHDKAKKIDIFYMPV-	
4	XP_001086882.2	100.0%	86.9%	KFNEPLD---MS-LFTLMGSPRIWATGQVITFYVDRLGYPYIDLTGVTNNGGIPQKISLDQDKSKIDIFYMPV-	
5	NP_001076141.2	99.4%	67.1%	KSGEPLD---TS-LFSLFGSPSKDKTGGITFYVDRLGYPYIDLSK-NVSVHGGIPQLGPIQDHDKAKKIDILYMPRT-	
6	XP_002919069.1	94.7%	66.8%	KFNVDLD---LN-LFSLIGSPQKATGQGITFYANRLGYPYPHIDEKTKGNVNGGIPQSGNLKKHLEKAKKIDIAYYIQT-	
7	NP_999176.1	94.5%	65.7%	KFYMPDD---LS-LFSFVTSPRASVTGQFLTFYANRLGYPYHVDENTGKNVNGGIPQLGSLQRHDKAEKIDILHYMQI-	
8	XP_002686960.3	94.1%	65.8%	IFSMPPD---LG-LFSLVGSPQKDVGTGQPIITFYADR LGYPYKINERTGVHKNGGIPQVASLKHDKAEKIDIAYYMPI-	
9	NP_001008413.3	99.6%	61.1%	RFQPLPD---LR-LFSVKGSPQKATGQFITFYADR LGYPYHIDEKTKGTVFGGIPQLGNLKSHEKAKKIDIAYYIPN-	
10	XP_003502178.1	94.5%	62.1%	KFNEPLD---LS-LFSLVGSPKKSATGQPIITFYVDR LGYPYHIDDS-NKSIHGGVPLGSLKSHLEKAKKIDIAYYMPI-	
11	NP_001166492.1	96.4%	59.2%	GTNQLD---MS-FFSIVGTPRKNIITGQSITLYVDR LGYPYIDPHTGAIHGGIPQLMNLQKHRSRQDILFYMPRT-	
12	NP_001019492.1	94.5%	61.1%	RFNQLD---LS-LFSLVGSPRKTATGHPVITFYSDRLGYPYHIDEM-HTAFHGGIPQLGSLKSHLEIAKGDIDHYMPI-	
13	XP_001507937.2	95.8%	57.3%	KHDVELD---MS-LFSLVGSTRQEKIGQVITFYVDR LGYPYIDEVTKSMTGLQLCLPDLHTKAKEDIVNMPISA	
14	NP_001073344.1	94.9%	57.8%	NVNDPID---LS-FFSLIGSPRKTATGQPVITFYVDR LGYPYHIDAN-QAEHYGGIPQRGDYQAHLRKAKTIDIEHYIPD-	
15	XP_003502177.1	94.9%	55.0%	NFSHSID---LS-LFPVIGSPRKTATGQPVITFYVDR LGYPYHIDTK-LAEHGGIPQLGNLKNHDKAKKIDIEHYIPV-	
16	XP_002190553.4	90.1%	54.0%	RTGVQLD---MN-FFPLIGSTLKTSTGQVITFYVDR LGYPYKNEITGEAFNGGIPQLSLELKHLEKAKKIDIEHYIPD-	
17	XP_002932242.3	91.9%	45.6%	KFKVNIID---IS-LFQITGSPESSTIAQVITFYVDR LGYPYINETNGKITNGGIPQLTNMDFLKKKLEKIDIEHYIPSS	
18	NP_001082194.1	90.9%	45.4%	KFKVKID---VS-LFQIVGTTFNSSIAQVITFYVDR LGYPYINETNGKISKGGIPQLTNMAFHLKAKKIDIEHYIPSS	
19	XP_002919077.1	90.5%	43.8%	KYNIGLN---LK-MFQVIGSPLAKARGQVITFYVDR LGYPYWYTSQ-GVPINGGIPQNTSLQVHLEKADQDINYYIPAE	
20	NP_002712114.1	82.6%	47.0%	KYNLRLN---LK-MFQVIGSPLAKARGQVITFYVDR LGYPYWYTSQ-GVPINGGIPQNTSLQVHLEKADQDINYYIPAE	
21	XP_532444.4	86.1%	44.6%	KYNIGLN---LK-MFQVIGSPLAKARGQVITFYVDR LGYPYWYTSQ-GVPINGGIPQNTSLQVHLEKADQDINYYIPAE	
22	XP_002818436.2	82.6%	46.5%	KYNLRLN---LK-IFPVIGSPLAKARGQVITFYVDR LGYPYWYTSQ-GVPINGGIPQNTSLQVHLEKADQDINYYIPAE	
23	NP_084124.1	81.2%	45.1%	KYNLRLN---LK-VFQVIGSPLAKARGQVITFYVDR LGYPYWYTSQ-GVPINGGIPQNTSLQVHLEKADQDINYYIPSE	
24	XP_003134772.2	86.1%	43.9%	KYNVRLN---LK-MFQVIGSPLAKARGQVITFYVDR LGYPYWYTAQ-GVPINGGIPQNTSLQVHLEKADQDINYYIPSE	
25	NP_036401.2	82.6%	46.5%	KYNLRLN---LK-MFQVIGSPLAKARGQVITFYVDR LGYPYWYTSQ-GVPINGGIPQNTSLQVHLEKADQDINYYIPAE	
26	XP_003261316.2	90.5%	43.8%	KYNLRLN---LK-MFPVIGSPLAKARGQVITFYVDR LGYPYWYTSQ-GVPINGGIPQNTSLQVHLEKADQDINYYIPSE	
27	XP_003407292.1	86.5%	44.4%	KYNLRLN---LK-MFQVIGSPLAKARGQVITFYVDR LGYPYWYTSQ-GVPINGGIPQNTSLQVHLEKADQDINYYIPAE	
28	XP_003586042.1	86.1%	43.9%	KYNLRLN---LK-MFQVIGSPLAKARGQVITFYVDR LGYPYWYTPQ-GVPINGGIPQNTSLQVHLEKADQDINYYIPSE	
29	NP_001094250.1	87.1%	40.5%	KYNLAVN---LK-VFQVIGSPLKDRRQVITFYANKLGSYPWYTSQ-GVPINGGIPQNTSLQVHLEKADQDINYYIPSE	
30	XP_003221368.2	82.4%	45.7%	RYNVTIN---LK-MFQVIGSPLAKARGQVITFYVDR LGYPYWYTSQ-DVPINGGIPQNTSLQVHLEKADQDINYYIPDE	
31	XP_003475093.1	88.3%	41.2%	KYKLRN---LE-MFQVAGSTLTKARGQVITFYPRRLGYPYWYTSQ-GVPINGGIPQNTSLQVHLEKADQDINYYIPVK	
32	NP_001090796.1	79.6%	45.4%	RYKVDLD---LS-IFDIVANPNETLIGSNVITFYHTRLGYPYFDE-GEVINGGIPQNTSLQVHLEKADQDINYYIPNL	
33	XP_003221369.1	80.0%	44.6%	RYDVDLD---LN-VFVWLSNPNETLIGSPVITFYHTRLGYPYFNDN-GDSINGGIPQNTSLQVHLEKADQDINYYIPNL	
34	XP_003449274.1	83.2%	40.1%	RYNITTN---VNHLEHIQSPRADWTGQVITFYANRLGYPYPHYTPH-GKAVFGGIPQNTSLDRHLFKAYQDINHFIPE	
35	NP_001074140.1	79.8%	44.6%	RFKVDLD---LS-VFDIVANHNETLIGSNVITFYHSHLGYPYPTTS-ETPINGGIPQNTSLQVHLEKADQDINYYIPK	
36	XP_003217669.1	81.6%	43.6%	RFKVDLD---FS-IFDLQASPNEGFVDQVITFYKERLGLYPYNAQ-KVAVNGGVPQNTSLQVHLEKADQDINYYIPK	
37	XP_001507903.3	83.8%	41.8%	QYNTGIN---LR-TFHITGSPAKARGQVITFYVDR LGYPYWYNAQ-EDPINGGIPQNTSLQVHLEKADQDINYYIPSAE	
38	XP_003449275.2	80.0%	44.0%	RFKVDLD---LS-IFDIVANLNETLIGSNVITFYHSHLGYPYYSNS-ETPINGGIPQNTSLQVHLEKADQDINYYIPK	
39	XP_001378617.3	80.2%	44.1%	RFRVSLN---FS-VFVKASPNEGFVDQVITFYRDLGYPYHDSH-LRPVHGGVPQNTSLQVHLEKADQDINYYIPK	
40	XP_003210019.2	82.0%	44.5%	RFQVALD---FS-IFDLHASPNEGFDQVITFYKERLGLYPYNNKR-WEPVNGGVPQNTSLQVHLEKADQDINYYIPK	
41	XP_414258.3	84.6%	42.5%	RFQVALD---FS-VFDLQASPNEGFVDQVITFYKERLGLYPYNNKQ-GKPVNGGVPQNTSLQVHLEKADQDINYYIPK	
42	NP_001080777.1	79.8%	44.9%	RFNVHLD---LK-LFDLNASPNEGFVDQVITFYKERLGMYPYDEH-GAPVSGGIPQNTSLQVHLEKADQDINYYIPK	
43	NP_001119986.1	83.0%	42.0%	RFNVHLD---LK-LFDLNASPNEGFVDQVITFYKERLGMYPYDEH-LAPVAGGIPQNTSLQVHLEKADQDINYYIPK	
44	XP_003221370.3	82.8%	41.7%	RYSVDLD---LK-IFNLSNPNESLNGPITFYANRLGYPYHFNDS-GDSVNGGIPQNTSLQVHLEKADQDINYYIPK	
45	XP_003448364.1	81.4%	40.9%	RHKIRFQ---LD-QFIVATSPNEGFDQVITFYKERLGLYPYFQD-ETPINGGIPQNTSLQVHLEKADQDINYYIPK	
46	XP_002189602.4	78.8%	43.7%	KYNVSLN---LE-VFDVLANDQQSFTGQDITFYSDKIGLFPYYSG-GVPVNGGIPQNTSLQVHLEKADQDINYYIPK	
47	NP_001074154.2	79.4%	42.8%	-LKVPLD---LS-LFQAVTTPAR-VHNSLSLKYKTRLGLFPYVLDLHSMKEYNGGIPQNTSLQVHLEKADQDINYYIPK	
48	XP_003448436.2	83.6%	39.9%	QYGVLD---LG-MFNIQVQNTQTFMGNITFYAEKLGYPYRSHQ-GEAINGGVPQNTSLQVHLEKADQDINYYIPK	
49	XP_002813763.3	82.4%	37.9%	RLKVPDLD---LN-AFDVQASPNEGFVDQVITFYRDLGYPYRFDQA-GRSVHGGVPQNTSLQVHLEKADQDINYYIPK	
50	XP_002935681.1	81.2%	42.2%	RFVTLTLD---LS-AFDIVLNQNTFGSEVITFYSSQLGYPYDEH-LSPVNGGIPQNTSLQVHLEKADQDINYYIPK	
51	XP_001168599.1	82.4%	37.9%	RLKVPDLD---LN-AFDVQASPNEGFVDQVITFYRDLGYPYRFDQA-GRSVHGGVPQNTSLQVHLEKADQDINYYIPK	
52	XP_687640.2	86.7%	37.4%	RHDVTFQ---LD-QFQIVASPNEGFTKQVITFYQDR LGYPYFKPD-STPVYGGIPQNTSLQVHLEKADQDINYYIPK	

53	NP_003764.3	82.4%	37.7%	RLKVPDLD---LN-AFDVQASPNEGFVNQITIFYRDRGLYPRFDASA-GRSVHGGVPCNVSLWAHAKMLQKRVEHYIRTQ
54	XP_003476739.1	83.2%	37.1%	RHKVSLD---LK-AFDVQASPNEGFVNQISITFYRDRGLYPHFNEA-GMSVHGGVPCNGSLQEHGMLRKPVEHYIRTQ
55	XP_003257153.1	82.4%	37.7%	RLKVPDLD---LN-AFDVQASPNEGFVNQITIFYRDRGLYPRFDASA-GRSVHGGVPCNVSLWAHAKMLQKRVEHYIRTQ
56	XP_002758427.1	81.6%	38.1%	RLKVPDLD---LN-AFDVQASPNEGFVNQITIFYRDRGLYPRFDASA-GRSVHGGVPCNVSLWAHAKMLQKRVEHYIRTQ
57	XP_001102414.2	80.8%	40.2%	RHSVDVD---VF-DVAVANPGQTFRGPDMTIFYSSQLGTYPYYTPT-GEPIVGGGLPCNASLIAHLARTFQDILAAP
58	NP_742037.2	80.2%	40.6%	RHKVPLD---LR-AFDEVATPNEGFFNQITIFYRDRGLYPRFDASA-GMSVHGGVPCNGSLWAHAKMLQKRVEHYIRTQ
59	NP_999605.1	81.6%	38.5%	RHKVPLDPKDK-AFDVQASPNEGFVNQITIFYRDRGLYPHFDSV-GRSVHGGVPCNGSLVWHLEMLKRGHVEHYIRTQ
60	NP_001009754.1	81.6%	38.5%	RHKMPLDPKDK-AFDVQASPNEGFVNQITIFYRDRGLYPHFDSV-GRSVHGGVPCNGSLVWHLEMLKRGHVEHYIRTQ
61	NP_083196.2	82.4%	39.5%	NFNVMN---LQ-VFNIPNPFETQSGSTIAVFYKPELGYYPYFSED-GTSFYGGIPQKVNLSHRLKSAAGDIADAVTLW
62	NP_001019491.1	79.8%	41.3%	NFDVMN---LQ-AFNIPNPFETQSGSTIAVFYKPELGYYPYFSED-GTSFYGGIPQKVNLSHRLKSAAGDIADAVTLW
63	NP_776772.1	81.6%	38.3%	RHKMPLDPKDK-AFDVQASPNEGFVNQITIFYRDRGLYPHFDSV-GRSVHGGVPCNGSLVWHLEMLKRGHVEHYIRTQ
64	NP_149349.2	82.0%	39.0%	RHGVDVD---VS-VFDDVANPGQTFRGPDMTIFYSSQLGTYPYYTPT-GEPIVGGGLPCNASLIAHLARTFQDILAAP
65	NP_001035086.1	79.4%	40.6%	RFVGVLD---LS-VFDDVANPGQTFRGPDMTIFYSSQLGTYPYYTPT-GEPIVGGGLPCNASLIAHLARTFQDILAAP
66	XP_003502176.1	85.3%	37.9%	RFVGNMN---LQ-VFGIIPNPLETQSGSTIAVFYKPELGYYPYFSED-RRSIYGGIPQKGNLSHRLKSAAGDIADAVTLW
67	XP_003257149.1	80.8%	39.5%	RHGVDVD---VS-VFDDVANPGQTFRGPDMTIFYSSQLGTYPYYTPT-GEPIVGGGLPCNASLIAHLARTFQDILAAP
68	XP_002813766.6	80.8%	40.0%	RHGVDVD---VS-VFDDVANPGQTFRGPDMTIFYSSQLGTYPYYTPT-GEPIVGGGLPCNASLIAHLARTFQDILAAP
69	NP_001017941.1	82.0%	38.5%	RHGVDVD---IS-IFDDVTPGQTFRGNMTIFYSSQLGTYPYYTSA-GEPIVGGGLPCNASLIAHLARTFQDILAAP
70	XP_002920567.1	79.0%	40.7%	KYGVVDVD---VS-VFDDVANPGQTFRGPDMTIFYSSQLGTYPYYTSA-GEPIVGGGLPCNASLIAHLARTFQDILAAP
71	XP_003476738.1	79.0%	40.9%	NYSVDVD---VS-VFDDVANPGQTFRGNMTIFYSSQLGTYPYYTSA-GEPIVGGGLPCNASLIAHLARTFQDILAAP
72	NP_999606.1	82.0%	38.8%	RHGVDVD---VS-VFDDVANPGQTFRGNMTIFYSSQLGTYPYYTSA-GEPIVGGGLPCNASLIAHLARTFQDILAAP
73	XP_002713406.3	78.6%	40.0%	MHGVDVD---VS-VFDDVANPGQTFRGNMTIFYSSQLGTYPYYTSA-GEPIVGGGLPCNASLIAHLARTFQDILAAP
74	XP_003500449.1	79.2%	40.4%	NYGVVDVD---VS-VFDDVANPGQTFRGNMTIFYSSQLGTYPYYTSA-GEPIVGGGLPCNASLIAHLARTFQDILAAP
75	XP_001509131.1	79.0%	38.2%	KFHVDVD---LD-VFDDVANPGQTFRGNMTIFYSSQLGTYPYYTSA-GEPIVGGGLPCNASLIAHLARTFQDILAAP
76	XP_001139800.4	79.8%	38.6%	FFNMAIN---LQ-VFNIPNPLETQSGSTIAVFYKPELGYYPYLSQD-GKSFYGGIPQKVNLSHRLKSAAGDIADAVTLW
77	NP_032343.3	78.8%	39.6%	EYGVVDVD---VS-VFDDVANPGQTFRGNMTIFYSSQLGTYPYYTPT-GEPIVGGGLPCNASLIAHLARTFQDILAAP
78	NP_997499.2	80.4%	38.3%	DHGVDVD---VS-VFDDVANPGQTFRGNMTIFYSSQLGTYPYYTPT-GEPIVGGGLPCNASLIAHLARTFQDILAAP
79	XP_001168796.1	77.8%	35.4%	RHGVDVD---VS-VFDDVANPGQTFRGPDMTIFYSSQLGTYPYYTPT-GEPIVGGGLPCNASLIAHLARTFQDILAAP
80	NP_997482.2	76.8%	36.7%	RFVGVLP---LD-ALGITANHGQRFHGNITIFYKQNGFLYPYFGR-ATAHGGIPCAVSDHHLAQAHAQIHLNLG-S
81	NP_001193181.1	77.8%	37.4%	RFGVPLP---LE-ALGITANHGQRFHGNITIFYKQNGFLYPYFGR-ATAHGGIPCAVSDHHLAQAHAQIHLNLG-S
82	NP_001186958.1	79.4%	35.4%	RFGVHLP---LD-ALGITANHGQRFHGNITIFYKQNGFLYPYFGR-ATAHGGIPCAVSDHHLAQAHAQIHLNLG-S
83	NP_999604.1	71.9%	39.4%	RFGVHLP---LE-ALGITANHGQRFHGNITIFYKQNGFLYPYFGR-ATAHGGIPCAVSDHHLAQAHAQIHLNLG-S
84	XP_001493753.3	71.9%	39.4%	RFGVHLP---LE-ALGITANHGQRFHGNITIFYKQNGFLYPYFGR-ATAHGGIPCAVSDHHLAQAHAQIHLNLG-S
85	NP_001121765.1	76.4%	38.0%	RYGVSLP---LQ-QYNIHNSHQRFHGNITIFYKQNGFLYPYFGR-ATAHGGIPCAVSDHHLAQAHAQIHLNLG-S
86	NP_821139.2	72.1%	38.6%	HFGVHLP---LD-ALGITANHGQRFHGNITIFYKQNGFLYPYFGR-ATAHGGIPCAVSDHHLAQAHAQIHLNLG-S
87	XP_002128103.1	72.9%	35.4%	KYNVPID---LS-SFDIHNPNHEEYVGNQMTIFYAALGLYPKYGTD-GLAVNGGIPQNGNTSAYEKCVDDIMARIPOS
88	XP_003642042.3	69.7%	37.2%	RFVGVLP---LA-DYGIENRGGRFAGQNTIFYKQNGFLYPYFGR-ATAHGGIPCAVSDHHLAQAHAQIHLNLG-S

consensus/100%
consensus/90%
consensus/80%
consensus/70%

			cov		pid 161		2		240	
1	NP_0033108.2	100.0%	100.0%	DN LGMAVIDWEERPTWARN-WKP-KD YKRNRSIELVQQNQVLSL TEATEKAKQEF EKAGKDFLVETIKLGLKLRPNHL						
2	XP_003318802.2	100.0%	96.3%	DN LGMAVIDWEERPTWARN-WKP-KD YKRNRSIELVQQNQVLSL TEATEKAKQEF EKAGKDFLVETIKLGLKLRPNHL						
3	XP_003261317.2	100.0%	93.3%	DN LGMAVIDWEERPTWARN-WKP-KD YKRNRSIELVQQNQVLSLAEATEKAKQEF EKAGKDFLVETIKLGLKLRPNHL						
4	XP_001086882.2	100.0%	86.9%	DN LGMAVIDWEERPTWARN-WKP-KD YKRNRSIELVQQNQVLSLPAATDKAKQEF EKAGKDFLVETIKLGLKLRPNHL						
5	NP_001076141.2	99.4%	67.1%	DNVGLAVIDWEERPTWARN-WKP-KDIYRKRSIELVQQNQVLSL TEATEKAKQEF EKAGKDFLVETIKLGLKLRPNHL						
6	XP_002919069.1	94.7%	66.8%	DSIGLAVIDWEERPTWARN-WKP-KDIYRKRSIELVQQNQVLSL TEATEKAKQEF EKAGKDFLVETIKLGLKLRPNHL						
7	NP_999176.1	94.5%	65.7%	DKVGLSVIDWEERPTWARN-WKE-KAIYRROSIELVQQNQVLSL TPAAATKLAKEFEKAGKDFLVETIKLGLKLRPNHL						
8	XP_002686960.3	94.1%	65.8%	DNVGLAVIDWEERPTWARN-WKP-KD YKRNRSIELVQQNQVLSL TEATEKAKQEF EKAGKDFLVETIKLGLKLRPNHL						
9	NP_001008413.3	99.6%	61.1%	DSVGLAVIDWEERPTWARN-WKP-KD YRDESVELVQKVPQSFPEASKIAKVD FETAGKDFLVETIKLGLKLRPNHL						
10	XP_003502178.1	94.5%	62.1%	DNVGLAVIDWEERPTWARN-WKP-KDIYRKRSIELVQQNQVLSL TEATEKAKQEF EKAGKDFLVETIKLGLKLRPNHL						
11	NP_001166492.1	96.4%	59.2%	DSVGLAVIDWEERPTWARN-WRP-KDIYRKRSIELVQQNQVLSL TEATEKAKQEF EKAGKDFLVETIKLGLKLRPNHL						
12	NP_001019491.1	94.5%	61.1%	DNVGLAVIDWEERPTWARN-WKE-KDIYRROSIELVQQNQVLSL TEATEKAKQEF EKAGKDFLVETIKLGLKLRPNHL						
13	XP_001507937.2	95.8%	57.3%	EKSLAVIDWEERPTWARN-WKP-KDIYRNRSELVQQNQVLSL TEATEKAKQEF EKAGKDFLVETIKLGLKLRPNHL						
14	NP_001073344.1	94.9%	57.8%	DKLGLAVIDWEERPTWARN-WKP-KD YRNRKSELVQSTVPGLSITATEATQKATQDFEAGRKDFMEETIKLGLKLRPNHL						
15	XP_003502177.1	94.9%	55.0%	DKFLAVIDWEERPTWARN-WKP-KD YRNRKSELVQANVAGISIEDATQKAKQEF ETEAGRKDFMEETIKLGLKLRPNHL						
16	XP_002190553.4	90.1%	54.0%	EQLGLAVIDWEERPTWARN-WGS-KDIYRQESIELVQQNQVLSL TEATEKAKQEF EKAGKDFLVETIKLGLKLRPNHL						
17	XP_002932242.3	91.9%	45.6%	KQNGLAVIDWEERPTWARN-WAS-KAIYKMSIEFARQMDITMTHKKAALIAEAQFESAQNFMQLTLRLGKAMPNYL						
18	NP_001082194.1	90.9%	45.4%	KQHGLAVIDWEERPLYTRN-WAS-KAIYKQSIIEFARQMDITMTHKKAALIAEAQFESAQNFMQLTLRLGKAMPNYL						
19	XP_002919077.1	90.5%	43.8%	DFSGLAVIDWEERPTWARN-WNT-KD YRQSRKLSISDMQENISATDIEDLAKETFEESAKAFMKETIKLGIKSRPKGL						
20	XP_002712114.1	82.6%	47.0%	DFSGLAVIDWEERPTWARN-WNT-KD YRQSRKLSISDMQANVSATDIEYLAKATFEESAKAFMKETIKLGIKSRPKGL						
21	XP_532444.4	86.1%	44.6%	DFNGLAVIDWEERPTWARN-WNT-KD YRQSRKLSISDMQENVSATDIEYLAKATFEESAKAFMKETIKLGIKSRPKGL						
22	XP_002818436.2	82.6%	46.5%	DFSGLAVIDWEERPTWARN-WNA-KD YRQSRKLSISDMQKNSATDIEYLAKATFEESAKAFMKETIKLGIKSRPKGL						
23	NP_084124.1	81.2%	45.1%	NFSLAVIDWEERPTWARN-WNT-KDIYRQSRKLSISDMKENISAADIEYLA KATFEESAKAFMKETIKLGIKSRPKGL						
24	XP_003134772.2	86.1%	43.9%	DFSGLAVIDWEERPTWARN-WNT-KD YRQSRKLSISELQENVSADIEYLAKATTFEESAKAFMKETIKLGIKSRPKGL						
25	NP_036401.2	82.6%	46.5%	DFSGLAVIDWEERPTWARN-WNS-KD YRQSRKLSISDMQKNSATDIEYLAKATFEESAKAFMKETIKLGIKSRPKGL						
26	XP_003261316.2	90.5%	43.8%	DFSGLAVIDWEERPTWARN-WNA-KD YRQSRKLSISDMGRNVSATDIEYLAKATFEESAKAFMKETIKLGIKSRPKGL						
27	XP_003407292.1	86.5%	44.4%	DFSGLAVIDWEERPTWARN-WNA-KD YRQSRKLSISETQENVSADIEYLAKATFEESAKAFMKETIKLGIKSRPKGL						
28	XP_003586042.1	86.1%	43.9%	DFSGLAVIDWEERPTWARN-WNT-KDIYRQSRKLSISETQENISAADIEYLAKATFEESAKAFMKETIKLGIKSRPKGL						
29	NP_001094250.1	87.1%	40.5%	NFSLAVIDWEERPTWARN-WNT-KDIYRQSRKLSISDMKENISAADIEYLAKATFEESAKAFMKETIKLGIKSRPKGL						
30	XP_003221368.2	82.4%	45.7%	DFTGLAVIDWEERPTWARN-WNT-KDIYRQSRKLSISAMQNVSTNALEHLAKFSFEQCAKAFMKETIKLGIKSRPKGL						
31	XP_003475093.1	88.3%	41.2%	DFRGLAVIDWEERPTWARN-WNA-KD YRNRKSELVFDLQQNVKASDIEYLAKATFEESAKAFMKETIKLGIKSRPKGL						
32	NP_001090796.1	79.6%	45.4%	DFKGLVIDWEERPTWARN-WGS-KDIYRNRKSELVFNHPTWDEQLKKAKEEFENAKKEFMKTIALAQQEKRSKGL						
33	XP_003221369.1	80.0%	44.6%	KFQGLVIDWEERPTWARN-WGN-KTIYKNSLELVKRRHPHPKNAVHAKKEEFENAKKEFMKTIALAQQEKRSKGL						
34	XP_003449274.1	83.2%	40.1%	DFRGLAVIDWEERPTWARN-WHK-KDIYRNRKSELTKKAYINVTAAQVEELARRRFEESAKAFMKETIKLGIKSRPKGL						
35	NP_001074140.1	79.8%	44.6%	DFHGLVIDWEERPTWARN-WGS-KDIYRNRKSELTRKHPGWPQSKVENEKEEFERAGQVFMNSTLLLAESRRPHGL						

2	XP_003318802.2	100.0%	96.3%	KIPDA-KSPLPVFVYTRIVFTDQ-----VLKFLSODELVYTFGETVALGASGIVVWGTLSIVRSMKSCLLLDNYMET
3	XP_003261317.2	100.0%	93.3%	KIPDA-KSPLPVFVYARIVFTDQ-----VLKFLSRDELVYTLGETVALGASGIVVWGSLSIVRSMKSCLLLDNYMET
4	XP_001086882.2	100.0%	86.9%	KIPDA-KNPLPVFVYARLVFTDQ-----VLKFLSREELVSTLGETVALGASGIVVWGSLSIIRSMKSCLLLDNYMET
5	NP_001076141.2	99.4%	67.1%	EVVNA-KSPLPVFVYTRIVFTDK-----IFQFLSODDLVNTIGETVALGASGIVVWGSHTLARSMSKCLNLDNYMKN
6	XP_002919069.1	94.7%	66.8%	QVSSV-KHPLPVFVYARVFTDV-----SLKYLSEDDLNTIGETVSLGVSGIIMWGSLSNLSQNVOSTELDNYMTN
7	NP_999176.1	94.5%	65.7%	KVANA-KSPLPVFVYTRPVFSGA-----SSRYLSODDLVNTIGETVALGASGIVVWGSLSNLSLTQSCMNLGYSYIKT
8	XP_002686960.3	94.1%	65.8%	KVANV-KSPLPVFVYTRPVFSDM-----SSKFLSQDDLSTIGETVALGASGIVVWGSFNLSLTQSCMNLGYSYIKT
9	NP_001008413.3	99.6%	61.1%	KIASV-ESPLPVFVYARVFTDG-----SSTYLSQGDVNSVGETVSLGASGIVVWGSLSNLSLTQSCMNLGYSYIKT
10	XP_003502178.1	94.5%	62.1%	KAKDP-QSPVPTFVYSRIVFGDL-----TYRFLSQKDLVNTIGETVALGASGIVVWGTLSGLVRSMSKCLNLDNYMKN
11	NP_001166492.1	96.4%	59.2%	KLMDQ-KNPLPIVYVTRIVFTDQ-----TTFTLEDDLHVSVEIVPLGVSGIIMWGSLSLTRSLVSCIGLENYMKG
12	NP_001019492.1	94.5%	61.1%	KVKDP-HNPLPIFVYTRPVFTDL-----TFQYLEQDDLNTIGETVALGASGIVVWGTLSNLSQTMKSCMNLHDYIKT
13	XP_001507937.2	95.8%	57.3%	KVADP-LNPLPIFVYTRPVFTNA-----PSNYLSQIDLNTIGETCAALGVSGIVVWGSLSNLTQSVKTCRIIDNYMKN
14	NP_001073344.1	94.9%	57.8%	KVGNV-SDPVPFVYTRPVFTDR-----TSEYLEDDDLNTIGETVALGASGIVVWGTLSLAQRAAGCPIHKKYMQT
15	XP_003502177.1	94.9%	55.0%	KVRSE-KDPVPTFVYTRPVFTDN-----TSEYLSQEDLVNTIGETVALGASGIVVWGTLSLAQRAAGCPIHKKYMQT
16	XP_002190553.4	90.1%	54.0%	YVANS-SHPLPVFVYTRPVFTDV-----YEYELSEDDLNTIGETSAALGASGIVVWGTLSLQNRNCTRIIDNYMKN
17	XP_002932242.3	91.9%	45.6%	SLS---KFTLPTVYVTRPVFTDQ-----PDKFLSEVDLANVIGETIAALGADGFVWVMDVNMVTSKKTCTDLSYLVK
18	NP_001082194.1	90.9%	45.4%	TFS---KYAVPIYVYTRPVFTNR-----PDEFLEVDLANVIGETIAALGADGFVWVMDVNMVTSKKTACTDLSYLVK
19	XP_002919077.1	90.5%	43.8%	TMTSH-DYALPVFVYTRLVGRNE-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
20	XP_002712114.1	82.6%	47.0%	TMTSH-NCSLPVFVYTRLVGRNE-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
21	XP_532444.4	86.1%	44.6%	TMTSH-DYALPVFVYTRLVGRNE-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
22	XP_002818436.2	82.6%	46.5%	TMTSH-DYALPVFVYTRLVGRDE-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
23	NP_084124.1	81.2%	45.1%	TMTSQ-DYALPVFVYTRLVGRDE-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
24	XP_003134772.2	86.1%	43.9%	TVTSH-GYALPVFVYTRLVGRDQ-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
25	NP_036401.2	82.6%	46.5%	TMTSH-DYALPVFVYTRLVGRDE-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
26	XP_003261316.2	90.5%	43.8%	TMTSH-DYALPVFVYTRLVGRDE-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
27	XP_003407292.1	86.5%	44.4%	AMTSH-DYLPVYVYTRLVGRDQ-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
28	XP_003586042.1	86.1%	43.9%	IMTSR-DHALPVFVYTRLVGRDQ-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
29	NP_001094250.1	87.1%	40.5%	TMTSH-DYALPVFVYTRLVGRDE-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
30	XP_003221368.2	82.4%	45.7%	FMTSH-DYALPVFVYTRLVGRDE-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
31	XP_003475093.1	88.3%	41.2%	TMTSH-KYALPVFVYTRLVGRYED-----PLFFLSQKDLISTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
32	NP_001090796.1	79.6%	45.4%	SMARK-DYSLPVFVYTRPVFYSY-----LYTLEADLVYTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
33	XP_003221369.1	80.0%	44.6%	SIARK-DYALPVFVYTRPVFYAY-----FQALTEIDLVHTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
34	XP_003449274.1	83.2%	40.1%	SLTSK-EYDLPVYVYTRLVGRDE-----ALNFLTIDLVHTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
35	NP_001074141.1	79.8%	44.6%	SIARN-DYDLPVYVYTRPVFYAY-----FVVLSESDLVHTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
36	XP_003217669.1	81.6%	43.6%	RQHHD-DYTLPVFVYTRPVYRNRQ-----NLTYSLEMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
37	XP_001507903.3	83.8%	41.8%	TMMSD-DYALPVFVYTRLVGRDA-----PLTFLSKHDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
38	XP_003449275.2	80.0%	44.0%	SIART-DFTLPVYVYTRPVFYAY-----FVVLSESDLVHTIETSAALGASGVVWGTLSNLTSSKGNCTKVKQFVSS
39	XP_001378617.3	80.2%	44.1%	REHHA-GYSLPVFVYTRPVYTIQ-----SFTVLSQEDLVNTIGETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
40	XP_003210019.2	82.0%	44.5%	QQHHE-GYSLPVFVYTRPVYSRK-----MDVLSQDPLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
41	XP_414258.3	84.6%	42.5%	QQHHE-GYSLPVFVYTRPVYSRK-----MDVLSQDPLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
42	NP_001080777.1	79.8%	44.9%	YRHHK-DYSLPVFVYTRPVYIRK-----LDLFSQMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
43	NP_001119986.1	83.0%	42.0%	YRHHK-DYSLPVFVYTRPVYIRK-----LDLFSQMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
44	XP_003221370.3	82.8%	41.7%	SIARK-DYALPVFVYTRPVFYAY-----FEPLSEIDLVHTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
45	XP_0033448364.1	81.4%	40.9%	SS-GD-GLARPVYVYTRPVYMSLE-----QLTETDLVSTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
46	XP_002189602.4	78.8%	43.7%	QGI-L-D-SGIPVYVYTRPVYMSLE-----LDLFSQEDLVNTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
47	NP_001074154.2	79.4%	42.8%	SLPKH-VHTAPVYVYTRPVYMSLE-----KKLYMNEIDLVSSIETSAALGASGAVVWGTLSNLTSSKGNCTKVKQFVSS
48	XP_003448436.2	83.6%	39.9%	DQV-T-PFAPPVYVYTRPVYTY-----LEFLSQEHLVYTIETSAALGASGAVVWGTLSNLTSSKGNCTKVKQFVSS
49	XP_002813763.3	82.4%	37.9%	RTHHA-NHALPVYVYTRPVYYSR-----RLTGLSEMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
50	XP_002935681.1	81.2%	42.2%	K-----DLPVLPYVYTRPVYYSR-----MDFLTQEDLVNTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
51	XP_001168599.1	82.4%	37.9%	RTHHA-NHALPVYVYTRPVYYSR-----RLTGLSEMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
52	XP_687640.2	86.7%	37.4%	SV-GD-ESARPVYVYTRPVYYSR-----RLTGLSEMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
53	NP_003764.3	82.4%	37.7%	RTHHA-NHALPVYVYTRPVYYSR-----RLTGLSEMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
54	XP_003476739.1	83.2%	37.1%	QSHHA-NHALPVYVYTRPVYHTS-----RLTGLSEMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
55	XP_003257153.1	82.4%	37.7%	RTHHA-NHALPVYVYTRPVYYSR-----RLTGLSEMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
56	XP_002758427.1	81.6%	38.1%	HTHHA-NHALPVYVYTRPVYYSR-----RLTGLSEMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
57	XP_001102414.2	80.8%	40.2%	VAA-G-DPNLPVLPYVQIFYDMT-----NHFLPDELEHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
58	NP_742037.2	80.2%	40.6%	HTHHA-NHALPVYVYTRPVYYSR-----GLTGLSEMDLISTIETSAALGASGAVVWGTLSNLTSSKGNCTKVKQFVSS
59	NP_999605.1	81.6%	38.5%	HTHHA-NHALPVYVYTRPVYYSR-----GLTGLSEMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
60	NP_001009754.1	81.6%	38.5%	DVHHA-NHALPVYVYTRPVYYSR-----GLTGLSEMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
61	NP_0083196.2	82.4%	39.5%	EMARK-DYVLPVYVYTRPVYYSR-----IEALSSEEDLVHTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
62	NP_001019491.1	79.8%	41.3%	EKARK-DYALPVYVYTRPVYYSR-----IEALSSEEDLVHTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
63	NP_776772.1	81.6%	38.3%	DVHHA-NHALPVYVYTRPVYYSR-----GLTGLSEMDLISTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
64	NP_149349.2	82.0%	39.0%	VAA-G-DPNLPVLPYVQIFYDMT-----NHFLPDELEHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
65	NP_001035086.1	79.4%	40.6%	EKT-T-HQMTSPVYVYTRPVYYSR-----MEFLSQDDLNTIETSAALGASGAVVWGTLSNLTSSKGNCTKVKQFVSS
66	XP_003502176.1	85.3%	37.9%	EMARK-DYVLPVYVYTRPVYYSR-----FEALSSEEDLVHTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
67	XP_003257149.1	80.8%	39.5%	VTA-G-DPNLPVLPYVQIFYDMT-----NHFLPDELEHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
68	XP_002813766.6	80.8%	40.0%	VAA-G-DPNLPVLPYVQIFYDMT-----NHFLPDELEHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
69	NP_001017941.1	82.0%	38.5%	AGA-G-DPKLPVLPYVQIFYDMT-----NHFLPAEELHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
70	XP_002920567.1	79.0%	40.7%	LGV-G-DPNLPVLPYVQIFYDKT-----NRFLPDELEHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
71	XP_003476738.1	79.0%	40.9%	RAA-R-DPNLPVLPYVQIFYEST-----SHLLPMEELHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
72	NP_999606.1	82.0%	38.8%	AAA-G-DPNLPVLPYVQIFHDMT-----NRLLSREELHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
73	XP_002713406.3	78.6%	40.0%	TAA-G-NPTLPVLPYVQIFYALT-----NHFLPLEELHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
74	XP_003500449.1	79.2%	40.4%	TAS-R-DPKVPLPVYVQIFYEMT-----NHFLPLEELHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
75	XP_001509131.1	79.0%	38.2%	MGT-G-DASLPVLPYVQIFYDKT-----NHFLPLEELHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
76	XP_001139800.4	79.8%	38.6%	EMARH-DYVLPVYVYTRPVYYSR-----TEALSSEEDLVHTIETSAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
77	NP_032343.3	78.8%	39.6%	IVS-R-DPHVPVYVYTRPVYYSR-----DYLPLEELHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS
78	NP_997499.2	80.4%	38.3%	LVS-R-DPHVPVYVYTRPVYYSR-----DYLPLEELHSLCESAALGAAGIVVWGTLSNLTSSKGNCTKVKQFVSS

62	NP_001019491.1	79.8%	41.3%	LLGPLYALNVTSAAKLCQSQSLCNSHGRCVRRKTPDS-SFYLHMPEDSQKNSV---TSKG-----VNIVISPKSK--LKAIV
63	NP_776772.1	81.6%	38.3%	SLVPYVNVSWAAQYCSWAQCHGHGRCVRRDPVA-HTFLHLSASSFRLVPS--HAPE-----PRLRPEGELS--WADRN
64	NP_149349.2	82.0%	39.0%	TLGPFILNVTSGALLCSQALCSGHGRCVRRTSHP-KALLLNPAASFSTIQ-----TPGG-----GPLSLRAGALS--LEDQA
65	NP_001035086.1	79.4%	40.6%	TLGRYIVNVTEAFLCSRKVCSSQGRCVRRDPSA-SVYLHNPENMWSIIPR--AQLPGPITGGPYSVAHRRRLWTGQETS
66	XP_003502176.1	85.3%	37.9%	LLGPLYVNVTSAAKLCQSQSLCNSHGRCVRRKTVES-SFYLHMPEDSHKSYV---INKG-----FKFVTSARSK--LKTIM
67	XP_003257149.1	80.8%	39.5%	TLGPFILNVTSGALLCSQALCSGHGRCVRRPSHP-KALLLNPAASFSTIQ-----TPGG-----GPLSLRAGALS--LEDQA
68	XP_002813766.6	80.8%	40.0%	TLGPFILNVTSGALLCSQALCSGHGRCVRRPSHP-KALLLNPAASFSTIQ-----TPGG-----GPLSLRAGALS--LEDQA
69	NP_001017941.1	82.0%	38.5%	TLGPSTILNVTSGARLCSQVLCSGHGRCARRPSYP-KARLILNPTSFSSTIKP-----TPGG-----GPLTLQAGALS--LEDRL
70	XP_002920567.1	79.0%	40.7%	TLGPFILNVTSGALLCSQALCSGHGRCARRPSHP-EALLILNPTSFSSTIQ-----TRGG-----GPLTLQAGALS--LEDRM
71	XP_003476738.1	79.0%	40.9%	TLGPFILNVTSGALLCSQALCFGHGRCVRRPSHP-DALLILSLASFSTIQ-----TPGG-----KPLTLKAGALS--HEDQA
72	NP_999606.1	82.0%	38.8%	TLGPFILNVTSGALLCSQAVCSGHGRCVRRPSHT-EALPILNPSFSSTIKP-----TPGG-----GPLTLQAGALS--LKDQV
73	XP_002713406.3	78.6%	40.0%	TLGPFILNVTSAAKLCQSQALCSGHGRCARRPSHP-EALLVLSPASFSSTIQ-----TPG-----GPLTLQAGALS--LKDQV
74	XP_003500449.1	79.2%	40.4%	TLGPFILNVTSAAKLCSEALCSGHGRCARRPSYP-EALLTLNPAASFSTIQ-----THDG-----RPPSLKGTLS--LKDQA
75	XP_001509131.1	79.0%	38.2%	TLGPFILNLTSTQQLCSQALCSGHGRCARRPSHP-HAFVLYNSSFSTIHR-----PPGS-----RHLVLTCKLP--KEDQA
76	XP_001139800.4	79.8%	38.6%	PLGHYAVNVTSAAKLCQSQSLCNSHGRCVRRKTPES-SFYLHMPESSGKEYV---LNKS-----FRFIISENK--OKTIK
77	NP_032343.3	78.8%	39.6%	TLGPFILNVTSAAKLCSEALCSGHGRCVRRPSYP-EALLTLNPAASFSTIEL-----THDG-----RPPSLKGTLS--LKDRA
78	NP_997499.2	80.4%	38.3%	TLGPFILNVTSAAKLCSEALCSGRGRCVRRPSYP-EALLTLSPASFSTIEP-----THDG-----RPLSLKGTLS--LKDRA
79	XP_001168796.1	77.8%	35.4%	TLGPFILNVTSGALLCSQALCSGHGRCVRRTSHP-KALLLNPAASFSTIQ-----TPGG-----GPLSLQAGALS--LEDQA
80	NP_997482.2	76.8%	36.7%	TLGPLYVNVTKAATAQSHQRCHGHGRCVRRDPGQMEAFHLHLPD-----D-----D-----D-----D-----D-----D
81	NP_001193181.1	77.8%	37.4%	TLGPLYVNVTRAAVACSHQRCHGHGRCVRRDPGQMEAFHLHLPD-----D-----D-----D-----D-----D-----D
82	NP_001186958.1	79.4%	35.4%	TLGPLYVNVTRAAMACSHQRCHGHGRCVRRDPGQMEAFHLHLPD-----D-----D-----D-----D-----D-----D
83	NP_999604.1	71.9%	39.4%	TLGPLYVNVTRAAMACSHQRCHGHGRCVRRDPGQMEAFHLHLPD-----D-----D-----D-----D-----D-----D
84	XP_001493753.3	71.9%	39.4%	TLGPLYVNVTRAATACVQRCHGHGRCVRRDPGQMEAFHLHLPD-----D-----D-----D-----D-----D-----D
85	NP_001121765.1	76.4%	38.0%	VLGEYITALRAGVTNCSERLCNAQGRCSRWDPHSHHMIPLGLPH-----D-----D-----D-----D-----D-----D
86	NP_821139.2	72.1%	38.6%	TLGPLYVNVTKAATAQSHQRCHGHGRCVRRDPGQMEAFHLHLPD-----D-----D-----D-----D-----D-----D
87	XP_002128103.1	72.9%	35.4%	ILGPLYIKSASDSAAKCSLNTCNSHGRCV-----D-----D-----D-----D-----D-----D
88	XP_003642042.3	69.7%	37.2%	VLGPLYVANVTAAARACSLAQCHGHGRCVRRQPRELSILHLHLAG-----D-----D-----D-----D-----D-----D

consensus/100%
consensus/90%
consensus/80%
consensus/70%

1	NP_003108.2	100.0%	100.0%	QFSEKFCYSCYSTL---SCKEKADVKDTDA-----VDVCIADGVCIDAFLLKPPMETEES-----QIFYNASST
2	XP_003318802.2	100.0%	96.3%	QFSEKFCYSCYSTL---SCKEKADVKDTDA-----VDVCIADGVCIDAFLLKPPMETEES-----QIFYNASST
3	XP_003261317.2	100.0%	93.3%	QFSEKFCYSCYSTL---SCKEKADVKDTDA-----VDVCIADGVCIDAFLLKPPMETEES-----QIFYNASST
4	XP_001086882.2	100.0%	86.9%	EFSEKFCYSCYTNL---SCKEKADVKDTDA-----VDVCIADGVCIDAFLLKPPMETEES-----P-PIFYNTSSST
5	NP_001076141.2	99.4%	67.1%	QFSKNFQCSCYTNL---NCKERTDMNNTQVT-----VNVCAV-ENVCTDITNVGPAVITYAPKEKKDVAHILSNITTSIN
6	XP_002919069.1	94.7%	66.8%	QFSKNFQCSCYANV---RCKERVDMTEIHT-----VNVCAV-ADVCIASFLL-----D-----D-----D
7	NP_999176.1	94.5%	65.7%	EFSKNFQCSCFANF---HCKERADIENTIHA-----INVCIIT-EDVCVEAFL-----D-----D-----D
8	XP_002686960.3	94.1%	65.8%	QFSKNFQCSCYANI---HCKKR-DIKNIHT-----INVCFIA-EDVCINASL-----D-----D-----D
9	NP_001008413.3	99.6%	61.1%	KFSDTFYCSCYANI---HCKKRVDIKNVHS-----VNVCAV-EDICIDSPVQLQPSDHSSSQEAST-TTFSISST
10	XP_003502178.1	94.5%	62.1%	YFSKNFQCSCYTNL---NCKERDPLESVST-----VNVCAV-ETACINSEV-----D-----D-----D
11	NP_001166492.1	96.4%	59.2%	EFSKNFQCSCYTNV---ACKDRLDMNNTQVT-----VNVCTA-NNICIDAVLNFLSLDDDEPPI-----D-----D
12	NP_001019492.1	94.5%	61.1%	YFSKNFQCSCYTNL---DCKERVDMNNTQVT-----VNVCTA-EDICINSLV-----D-----D-----D
13	XP_001507937.2	95.8%	57.3%	QFSKFTFCRCFAGS---SCKTVMNNTTSF-----IYVCIAD-EDICIDAVLNFLSLDDDEPPI-----D-----D
14	NP_001073344.1	94.9%	57.8%	YFSEHFCSCYFIRM---TCKETSDFKNVQD-----VNVCAV-DNVCIAKAKVEP-----D-----D-----D
15	XP_003502177.1	94.9%	55.0%	YFSEHFCSCYFIRM---DCKETSDFKNVQD-----VNVCAV-DNVCIAKAKVEP-----D-----D-----D
16	XP_002190553.4	90.1%	54.0%	TFIEKFDCHCYAGH---SCEPRADINDIHY-----LHACIS-EDICIDAVLNFLSLDDDEPPI-----D-----D
17	XP_002932242.3	91.9%	45.6%	YFSKNFQCSCYANV---HCKERADIENTIHA-----INVCIIT-EDVCVEAFL-----D-----D-----D
18	NP_001082194.1	90.9%	45.4%	YFSKNFQCSCYANV---HCKERADIENTIHA-----INVCIIT-EDVCVEAFL-----D-----D-----D
19	XP_002919077.1	90.5%	43.8%	AMEEKFSCHCYQGYEGADCRGKKTADGC-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
20	XP_002712114.1	82.6%	47.0%	VMAEKFSCHCYQGYEGADCRGKKTADGC-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
21	XP_532444.4	86.1%	44.6%	ALEEFSFCHCYQGYEGADCRGKKTADGC-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
22	XP_002818436.2	82.6%	46.5%	VMADTFSCCHCYQGYEGADCRGKKTADGC-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
23	NP_084124.1	81.2%	45.1%	VMAENFLCHCYEGYEGADCRG-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
24	XP_003134772.2	86.1%	43.9%	VLVERFSCCHCYQGYEGTDCREMKRADGC-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
25	NP_036401.2	82.6%	46.5%	VMADTFSCCHCYQGYEGADCRGKKTADGC-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
26	XP_003261316.2	90.5%	43.8%	VMADTFSCCHCYQGYEGPDCREIKTADGC-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
27	XP_003407292.1	86.5%	44.4%	VMAEKFSCHCYQGYEGADCRAMKTPDG-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
28	XP_003586042.1	86.1%	43.9%	VLAERFSCCHCYQGYEGADCRGKKTADGC-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
29	NP_001094250.1	87.1%	40.5%	AMAENFLCHCYEGYEGADCRD-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
30	XP_003221368.2	82.4%	45.7%	IMTEKFTFCCHCYQGFEGENCCKIQTVDG-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
31	XP_003475093.1	88.3%	41.2%	VMKQKFFCQCYQGEGANCCQEMKEVDGSGT---LSSC-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
32	NP_001090796.1	79.6%	45.4%	YMEQRFMCQCY-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
33	XP_003221369.1	80.0%	44.6%	AMKEKFMCCQCYQGWGTG-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
34	XP_003449274.1	83.2%	40.1%	LLMERFRFCHCYEGHNGENCDSINKVREDKG---PWEEEE-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
35	NP_001074140.1	79.8%	44.6%	DMKQKFTFCQCY-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
36	XP_003217669.1	81.6%	43.6%	FLQHNFCQCHCYQGWREGGCEEQ-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
37	XP_001507903.3	83.8%	41.8%	VMEKFSCHCY-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
38	XP_003449275.2	80.0%	44.0%	DMKQKFTFCQCY-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
39	XP_001378617.3	80.2%	44.1%	QLREHFQCCY-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
40	XP_003210019.2	82.0%	44.5%	FLQTHFRCHCYQGWQGNSCQPPA-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
41	XP_414258.3	84.6%	42.5%	FLQTHFRCHCYQGWQGNSCQQA-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
42	NP_001080777.1	79.8%	44.9%	VLRSQFRCCY-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
43	NP_001119986.1	83.0%	42.0%	TLRSQFRCCY-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D
44	XP_003221370.3	82.8%	41.7%	AMEEKFSCHCYQGS-----VMAEKFSCHCYQGYEGADCRGKKTADGC-----D-----D-----D

45	XP_003448364.1	81.4%	40.9%	GFEADFQCQCY
46	XP_002189602.4	78.8%	43.7%	RLAKEFSCQCY
47	NP_001074154.2	79.4%	42.8%	DWKS ^K FT ^E CQCYEDR---NC
48	XP_003448436.2	83.6%	39.9%	LMSEFQCRCYAGWRGQSC ^S E
49	XP_002813763.3	82.4%	37.9%	HLQTHFRCQCYLGWSGEQ
50	XP_002935681.1	81.2%	42.2%	YFGE ^E HFY ^F CRCY
51	XP_001168599.1	82.4%	37.9%	HLQTHFRCQCYLGWSGEQ
52	XP_687640.2	86.7%	37.4%	RLRDDFQCQCYNGYSGDD ^C ST ^K D
53	NP_003764.3	82.4%	37.7%	HLQTHFRCQCYLGWSGEQ
54	XP_003476739.1	83.2%	37.1%	YLRTHFRCQCY
55	XP_003257153.1	82.4%	37.7%	HLQTHFRCQCYLGWSGEQ
56	XP_002758427.1	81.6%	38.1%	HLQTHFRCQCY
57	XP_001102414.2	80.8%	40.2%	QMAVEFKCRCYPGWQGPWC ^E Q ^K S
58	NP_742037.2	80.2%	40.6%	YLQMHFRCHCY
59	NP_999605.1	81.6%	38.5%	HLQTHFRCQCY
60	NP_001009754.1	81.6%	38.5%	HLQTHFRCQCY
61	NP_083196.2	82.4%	39.5%	NMKNGFVCHCY
62	NP_001019491.1	79.8%	41.3%	NMKNGFVCHCY
63	NP_776772.1	81.6%	38.3%	HLQMHFRQCY
64	NP_149349.2	82.0%	39.0%	QMAVEFKCRCY
65	NP_001035086.1	79.4%	40.6%	RFADSFRCQCF
66	XP_003502176.1	85.3%	37.9%	NMKNGFVCHCYYGWYGES ^C RSHPNLLSRKNKAPVTAFNS ^V VFLGMTL ^C V
67	XP_003257149.1	80.8%	39.5%	QMAVEFKCRCYPGWQGLWC ^E Q ^K S
68	XP_002813766.6	80.8%	40.0%	QMAVEFKCRCYPGWQGPWC ^E Q ^K S
69	NP_001017941.1	82.0%	38.5%	RMAVEFECRCY
70	XP_002920567.1	79.0%	40.7%	RMAVEFQCRCY
71	XP_003476738.1	79.0%	40.9%	QMAVEFRCHCY
72	NP_999606.1	82.0%	38.8%	QMA ^E EFQCRCY
73	XP_002713406.3	78.6%	40.0%	QMATEFQCRCY
74	XP_003500449.1	79.2%	40.4%	QMAM ^K FKCRCY ^S
75	XP_001509131.1	79.0%	38.2%	RMMIEFECRCY
76	XP_001139800.4	79.8%	38.6%	DMKNGFVCHCY
77	NP_032343.3	78.8%	39.6%	QMA ^M K ^F RCRCY
78	NP_997499.2	80.4%	38.3%	QMA ^M K ^F RCRCYRGWSGEWC ^K K ^Q
79	XP_001168796.1	77.8%	35.4%	QMAVEFKCRCYPGWQGPWC ^E Q ^K S
80	NP_997482.2	76.8%	36.7%	
81	NP_001193181.1	77.8%	37.4%	-AN ^E S ^F S ^C RCRCYHGWAGPT ^C Q ^E PRPELRPEEA-
82	NP_001186958.1	79.4%	35.4%	-DWKS ^F S ^F S ^C HCYHGWAGPT ^C Q ^E
83	NP_999604.1	71.9%	39.4%	
84	XP_001493753.3	71.9%	39.4%	
85	NP_001121765.1	76.4%	38.0%	DMRS ^K FK ^C V ^C YEGWS
86	NP_821139.2	72.1%	38.6%	
87	XP_002128103.1	72.9%	35.4%	
88	XP_003642042.3	69.7%	37.2%	-SWA-
	consensus/100%		
	consensus/90%			.h..tF.CpCa.....
	consensus/80%			.ht.pF.CpCY.....
	consensus/70%			.htppFpCpCY.....

	cov	pid	561	.	.] 581
1	NP_003108.2	100.0%	100.0%	LSATMFI	
2	XP_003318802.2	100.0%	96.3%	LSATMFI	VSILFLIISVSASL
3	XP_003261317.2	100.0%	93.3%	LSATMFI	VSILFLIISVSWSL
4	XP_001086882.2	100.0%	86.9%	VSTTMFI	VIIILFLIISVSWSL
5	NP_001076141.2	99.4%	67.1%	SSTTM	
6	XP_002919069.1	94.7%	66.8%		
7	NP_999176.1	94.5%	65.7%		
8	XP_002686960.3	94.1%	65.8%		
9	NP_001008413.3	99.6%	61.1%	TTATV	
10	XP_003502178.1	94.5%	62.1%		
11	NP_001166492.1	96.4%	59.2%		
12	NP_001019492.1	94.5%	61.1%		
13	XP_001507937.2	95.8%	57.3%		
14	NP_001073344.1	94.9%	57.8%		
15	XP_003502177.1	94.9%	55.0%		
16	XP_002190553.4	90.1%	54.0%		
17	XP_002932242.3	91.9%	45.6%		
18	NP_001082194.1	90.9%	45.4%		
19	XP_002919077.1	90.5%	43.8%		
20	XP_002712114.1	82.6%	47.0%		
21	XP_532444.4	86.1%	44.6%		
22	XP_002818436.2	82.6%	46.5%		
23	NP_084124.1	81.2%	45.1%		
24	XP_003134772.2	86.1%	43.9%		
25	NP_036401.2	82.6%	46.5%		
26	XP_003261316.2	90.5%	43.8%		
27	XP_003407292.1	86.5%	44.4%		

28	XP_003586042.1	86.1%	43.9%	-----
29	NP_001094250.1	87.1%	40.5%	-----
30	XP_003221368.2	82.4%	45.7%	-----
31	XP_003475093.1	88.3%	41.2%	-----
32	NP_001090796.1	79.6%	45.4%	-----
33	XP_003221369.1	80.0%	44.6%	-----
34	XP_003449274.1	83.2%	40.1%	-----
35	NP_001074140.1	79.8%	44.6%	-----
36	XP_003217669.1	81.6%	43.6%	-----
37	XP_001507903.3	83.8%	41.8%	-----
38	XP_003449275.2	80.0%	44.0%	-----
39	XP_001378617.3	80.2%	44.1%	-----
40	XP_003210019.2	82.0%	44.5%	-----
41	XP_414258.3	84.6%	42.5%	-----
42	NP_001080777.1	79.8%	44.9%	-----
43	NP_001119986.1	83.0%	42.0%	-----
44	XP_003221370.3	82.8%	41.7%	-----
45	XP_003448364.1	81.4%	40.9%	-----
46	XP_002189602.4	78.8%	43.7%	-----
47	NP_001074154.2	79.4%	42.8%	-----
48	XP_003448436.2	83.6%	39.9%	-----
49	XP_002813763.3	82.4%	37.9%	-----
50	XP_002935681.1	81.2%	42.2%	-----
51	XP_001168599.1	82.4%	37.9%	-----
52	XP_687640.2	86.7%	37.4%	-----
53	NP_003764.3	82.4%	37.7%	-----
54	XP_003476739.1	83.2%	37.1%	-----
55	XP_003257153.1	82.4%	37.7%	-----
56	XP_002758427.1	81.6%	38.1%	-----
57	XP_001102414.2	80.8%	40.2%	-----
58	NP_742037.2	80.2%	40.6%	-----
59	NP_999605.1	81.6%	38.5%	-----
60	NP_001009754.1	81.6%	38.5%	-----
61	NP_083196.2	82.4%	39.5%	-----
62	NP_001019491.1	79.8%	41.3%	-----
63	NP_776772.1	81.6%	38.3%	-----
64	NP_149349.2	82.0%	39.0%	-----
65	NP_001035086.1	79.4%	40.6%	-----
66	XP_003502176.1	85.3%	37.9%	-----
67	XP_003257149.1	80.8%	39.5%	-----
68	XP_002813766.6	80.8%	40.0%	-----
69	NP_001017941.1	82.0%	38.5%	-----
70	XP_002920567.1	79.0%	40.7%	-----
71	XP_003476738.1	79.0%	40.9%	-----
72	NP_999606.1	82.0%	38.8%	-----
73	XP_002713406.3	78.6%	40.0%	-----
74	XP_003500449.1	79.2%	40.4%	-----
75	XP_001509131.1	79.0%	38.2%	-----
76	XP_001139800.4	79.8%	38.6%	-----
77	NP_032343.3	78.8%	39.6%	-----
78	NP_997499.2	80.4%	38.3%	-----
79	XP_001168796.1	77.8%	35.4%	-----
80	NP_997482.2	76.8%	36.7%	-----
81	NP_001193181.1	77.8%	37.4%	-----
82	NP_001186958.1	79.4%	35.4%	-----
83	NP_999604.1	71.9%	39.4%	-----
84	XP_001493753.3	71.9%	39.4%	-----
85	NP_001121765.1	76.4%	38.0%	-----
86	NP_821139.2	72.1%	38.6%	-----
87	XP_002128103.1	72.9%	35.4%	-----
88	XP_003642042.3	69.7%	37.2%	-----
	consensus/100%		
	consensus/90%		
	consensus/80%		
	consensus/70%		