

Table S6

	1	10	20	30	40	50	60	70	80	90	100	110	120	130	
DRO-Q94898	MERPEYDGTTCATALWTKQVGFQIENWKQNDLVNIPTGVGRICYKDSVYENGWAQIEVETQRTYPDWVQAYAGMLEGSL														
MUS-Q8BHG8	MAAPYDGSSSGGWAARALRRALAL TSL TTLALLASLTGLLL SGPAGALPTLGPGRQNPDPVSRTRSLLLDAASGQLRLEDGFHPDAVAMANTNAIRETGMAYLDLSTNGRYNDSLQAYAGVVEASY														
HOM-Q8NHP8	MYGQMYCYPGSHLARAL TRALALA-----LVLALLVGPFLSGLAGAI PAPGGWARDGQVPPASRSRSVLLDYSAGQLLMYDGRHPDAVAMANTNAIRETGMAYFLELGTSGQYNDLQAYAGVVEARY														
CEL-062146	MTRLIRSKKQFLIRSLHSVFYYL-----GSL LHSTFEMNFVIGLLLATVVASQSSEGRDESITYKQLCIYDDKQVYLDGFDCRNQVAVR--RQNAVNTTGMTFLEVETKENYCPQLQAYSAGYLEGLL														
DIC-Q8MN53	MKLFILLIYIVFLISNSYSLSSSDSSSDSGSDVQYYSLSQFQVYVQGKQI--PGSIAMGYFKDEMNDGHWGKLSIETVSTVSDNI AFKAGYLEGYL														
Consensusq.....p..!a...k#.v.e.GWa.levET..ty.d..qayaAG.lEG.l														
	131	140	150	160	170	180	190	200	210	220	230	240	250	260	
DRO-Q94898	TMRNIYNQMSNTISSSCERDESTQKFCGMLRDLTTNYHRLKRQTEK-AENDHYHQHLHFITQLEGLETGKRGASRRASDLEEEIPFSDFLMNAARDIQDLKIYYENYELQNSTEHTEEPRTDQPKN														
MUS-Q8BHG8	SEELIYMHMMNTVYNYCGPFYEYGYCEKLNFLLEANLEMMQREMEL-NPDSPYHQVRLTLLQLKGLEDSYEGRLTFPTG--RFTIKPLGFLLLQISGLEDLE-----PALN-----KTNTKP-S														
HOM-Q8NHP8	SEELIYMHMMNTVYNYCGPFYEYGYCERLKSFLLEANLEMMQEMES-NPDSPYHQVRLTLLQLKGLEDSYEGRVSPFAG--KFTIKPLGFLLLQLSGLEDLE-----LALN-----KTKIKP-S														
CEL-062146	SKTYLTYHLKNAQEDYCKNF---TGYSRSLSDFLTENQKWIQSSLETYAPDDLWYGAVNRTYHQVSGLIDAYEGREFKPRI--TYELHPI--LYLNLNGDFYDLE-----KKN-----KTRDPAFE														
DIC-Q8MN53	TMEYIYKFSGNFYFNFFNTSNIKEIPTETLT-FYSDNWEYMMERYNSSTTDPYMIQIRNAMSQQIGLYEGYNAAAGEDYQ--KTFIEIYMINLYGDMGDIYTLT-----TTPNNEFIPMDRKEVEQLM														
Consensus	tw..iy..w.Nt..s.c...e.....c..L.dfl.t.N.....#..a..d.YHq..l...ql.GLe.gY...a...r.....ei.....fll.n..gDi.dL.....N.....d.p..														
	261	270	280	290	300	310	320	330	340	350	360	370	380	390	
DRO-Q94898	FFLPSATMLTKIVQEEESPQVLQLLFGHSTAGSYSSMLRIQKRYKFHYHFSSKLRSNTPVGVYDITFTGYPGILGSTDDFYTIKGRHLHAIYGGVGIKNEMLQLAKTVDPKKMVPVLRVMAANRISQNRQ														
MUS-Q8BHG8	LGSGLSALIKLL-----PGGHDLVAHNTMNSYQNLRIIKKYRLQFREGPQEEYPLVAGNMLVFSSYPGTIFSGDDFY-ILGSLVTLETTIGNKNPAL--WKYVQPQGCYLEMIRNVVANRLALDGA														
HOM-Q8NHP8	LGSGLSALIKLL-----PGQSDLLVAHNTMNYQHMLRVIKKYMLQFREGPWGDYPLVPGNKLVFSSYPGTIFSCDDFY-ILGSLVTLETTIGNKNPAL--WKYVPRPGCVLEHVRNIVANRLASDGA														
CEL-062146	QTGGKCSGLIKYA-----PGNADLFISQVTHSGFQNLRVIKLYKFGY-----DRQFYPGYASSFSSYPGLLYSSDDFA-LQTSGLAVIETTISVFNTSL--FENTKPYGQLPTHIRAIVSNQLARDAR														
DIC-Q8MN53	ATTGHCTSIKLT-----NNCSDLSAHTSWADFVHIRIYKRINIPV-----ASTPYGSETLFSSYPGLLYSIDDYQIRPSKHLHLETNTILNQLT--YQQINAQS-FMYHVRNLVANRLANNGF														
Consensus	...gsct.liK.....p...#Ll..h.t...%s.MIR!.Krykf.y.....tvpG....FssYPG.l.S.DDFy.i.gs.Lh.iet..gikN..L..wk.v.p...vp.w.R..vaNrIa.#..														
	391	400	410	420	430	440	450	460	470	480	490	500	510	520	
DRO-Q94898	TWSAMSR-HPFTGAKQMITVDLNKMKVQDNLVYLEGDDKHDDAPVYVLENEKORTAIQQRHDQLRDMVHIAEQLPGMHTKKDVTQGFVPGNTSMLANGVPYFKNVLELSGVNYSDDQLTVADEEELTS														
MUS-Q8BHG8	TWADVFKRFNSGTYNMQMIVDYKAFIPNGPSPG-----SRVLTILEQIPGMVYVADKT--AELYKTTYWASYNIPYFETVFNASGLQALVAQ---YGDWFSYTK														
HOM-Q8NHP8	TWADIFKRFNSGTYNMQMIVDYKAFIPGGPSPG-----SRVLTILEQIPGMVYVADKT--SELYQKTYWASYNIPSFETVFNASGLQALVAQ---YGDWFSYDG														
CEL-062146	EWCKLYSLYNSGTYNMQMAYLDYKFKFPNQPLPK-----NGLFYVLEQMPGKIYYSDLT--WFVEKYSYFPSYNIPIFFKEITEISGFIGQAQK---MGDFKNGA														
DIC-Q8MN53	QWYSIFVENNSGTNNIQFYVLDYKLFYPTSTELQ-----SDLLHIVEQYPGGYQAADVT--LTLWEQGYMPSYNIPIFFEEVFDILGYPYVEK---FGDLFTYEY														
Consensus	tWas..sr.nsgT.n.Qw..vDykkfkp...l.....d..w!.EQ.PGm....DvT....v...tyw.syn.PyFk.!.#.sG..y...q....gD.f....														
	521	530	540	550	560	570	580	590	600	610	620	630	640	650	
DRO-Q94898	LASVDKYLRTHGFRGDLGSEQESIAYGNIDLKLFYNARLGISDFHAFAGPVFLRFQHTQPRTLEDEGQDGGVPPAASMGDERLSVSIEDADSLAEMELITERRSVRNDMRAIAMRKIGSGPFKUSEMSP														
MUS-Q8BHG8	NPRAKIFQRDQSLVEDMDAMVRLMRYNDFLHDPLSLC-----EACNPKPNAENAI SARSDLNPAANGSYPFQALHQRAGGIDVYKVTSTLAKYMSMLAASGPT-WDQ-----CPPFQWSK-SP														
HOM-Q8NHP8	SPRAQIFRRNQSLVQDMDSMVRLMRYNDFLHDPLSLC-----KACNPQNGENAI SARSDLNPAANGSYPFKALRQRSHGGIDVYKVTSM SLARILSLLAASGPT-WDQ-----VPPFQWST-SP														
CEL-062146	SPRAKIFERDHNVDLDSL TALMRYNDYKNDEF SKC-----K-CNPPYSAEAGISARGDLNPAANGTYEFPGGQGHVNHGALDYKGTNVELMKKLQFYAQQGPT-WGK-----VPSFKHSE-FD														
DIC-Q8MN53	NPRANIFRRDH SKLETLDMMNIIDYNQYKTDPF SMG-----Y---PGNSINARFDIKGGS LPS-GNPIYSWFYHGTHGGIDGKAINYDMVNSFTAVARNGPTVTSO-----CPPFNWND-W														
Consensus	.pra.i%.Rdhg...d\$......i.Yn#.d.fs.....a..pp.....l.p.g....p.....hg.ldvk....d.....a..gpt..d.....ppFkUse.sp														
	651	660	670	679											
DRO-Q94898	VEEGGGHEGHPDEWFDKYSPKWAH														
MUS-Q8BHG8	FHSML-HMGQPDLMFSPIRVPWD														
HOM-Q8NHP8	FSGLL-HMGQPDLMKFAPVKYSWD														
CEL-062146	FKDKVNHVGHPEWKFNTLVHKWETEINA														
DIC-Q8MN53	--SLISHQYMPQIYNFTWISINI														
ConsensusH.ghP#ewnF...s.kw.....														