

	1	10	20	30
B0FWI3	FTVGENAL	AANTLASV	LNIFYD	DRADDPTVEGWD
C9RJA3	FTVGENAL	AANTLASV	LNIFYD	DRADDPTVEGWD
Q6LUT2	FCVAEGLLM	QNTFFSDV	LHYFKS	QRCSGGIYEC
Q9KUA8	FTIARGVLM	QRTFSDV	LHYFKS	QRCSGGQFDQ
Q11VF8	...PYFTSTE	YKKAALWMT	TRFYGG	QRSDDNNWLLYN
B8I6V7	FKI.GNDI	FKPLLTDV	ARYFYF	QRSQSDTLTEEYC
A3DD30	FEI.GEGI	YGPLVVDAA	ARYFYF	QRQGIIELEEPPYA
P71140	FEI.GEGI	YGPLVVDAA	ARYFYF	QRQGIIELEEPPYA
Q9AQF4	FKI.ASDV	YKNLLFDS	QRYFFY	QRQGIIELEEPPYA
A3DDN1	FKI.AMNV	YEDAFKTA	MLGMYL	LRCCGTSVSATYN
B8I7X6	FKI.DKNI	YANPFKTA	MLGMYL	LRCCGTSVSATHN
W8PF21	FAI.GPV	YRDVLYAA	ARSYYL	QRCCGVAIDDPIT
D9ZF47	CII.SSKA	YHTLNQTL	CKALYF	QRCCGMALLETFA
P23658	FSI.SNDA	YDKLMDK	ICKCFY	LRCCGDALSKEFA
B8I4R4	FLI.DDNV	YSKLGDM	LKALCY	QRCCGTALTPDFA
A0A346PYQ5	FKI.NENV	YDKVKDAL	LKVMYF	QRCCGIELKEEYA
C8WSJ6	VVI.HRRA	YRDVLEAM	LRFFDY	QLCGVVLPEDA
Q9AJS0	VVI.HRRA	YRDVLEAM	LRFFDY	QLCGVVLPEDA
F8IJE7	IHV.HRRA	YRDVLEAM	VRFFDY	QLCGVALPEEEA
D7PC10	LAI.HPDV	YANLHKGL	QKFFFY	QRCCGVELSAEHA
B709C9	FII.SEQP	YVEVHGG	LKAFYY	LRCCGEDLDEEYA
H2BNN6	FGI.AEDV	YDEVTKAV	LKMFYY	QRSGELEAEYVG
A9UGW3	...	...	...	...
E9NSJ5	FII.ADDV	YNDAL	KASILMLY	TRFFDY
Q6DTY2	FTI.SEDI	YNNVFKDA	VRFFYM	QRCCQELPAIYA
D4LAY7	FEI.GDDV	YGSLLDD	VKMLYL	QRCCGTAVQD
D4LDI9	FKI.GNDV	YDGLITDA	VNIFYQ	NRSQSDTLDEEYI
Q9Z3X7	FDI.SADP	VKCLRADS	LAFYYH	NRSGTAEIAQYV
P14090	FDI.DGDL	YQQLRLYDA	LNIFYL	NRSGTEIEADV
Q05156	FDI.DAAA	YRFLRDS	VKYYT	QRSGTAEIARDL
Q47FF7	FDI.DESV	YEELRVDA	LSFYYP	QRSQGIIEILDSI
Q08166	FDI.DESV	YEELRVDA	LSFYYP	QRSQGIIEILDSI
GH9c_CD	...	...	...	...
GH9a_CD	...	...	...	...
C5HG55	FAI.SNTAL	KGALYDS	LKIFYH	NRSGTAEIETQYT
P10476	FSI.SSTT	FNAAFYDA	LKIFYH	NRSGTAEIETPYT
B8I7V4	FNI.GDDL	FTQMKYDS	MKYFYH	NRSAIPIQMPYC
Q46002	FNI.GDDL	FTQMKYDS	MKYFYH	NRSAIPIQMPYC
Q9LAJ2	FAI.GKEL	YNKLQKDA	MKYFYH	NRSGIPIETMPYA
Q9R8E8	FTI.GTDL	YSKMKHES	IKIFYH	NRSAIPIETMPYA
H9TUL5	FQI.GSAL	YSQLKQNA	LHYFYH	NRSGIPIEPEYA
F4YTG7	FAI.GETL	YDYLKQDA	LRYFYH	NRSGMDLESKYA
GH9f_CD	...	...	...	...
Q6RSN8	FDI.RKDI	YTMKYDA	LAFYH	NRSGIPIEMPYA
A3DCH2	FDI.RKDI	YTMKYDA	LAFYH	NRSGIPIEMPYA
Q59325	FDI.RKDI	YTMKYDA	LAFYH	NRSGIPIEMPYA
A3DCH1	FDI.SADI	YSKMKFDA	LAFYH	NRSGIPIEMPYA
Q69308	...	...	...	...
P0C2S1	FDI.SADI	YSKMKFDA	LAFYH	NRSGIPIEMPYA
Q59444	FEV.SDEW	VLRELKSN	IKSFYY	QRSQVELPERLA
C9RJ28	FEV.SDEW	VLRELKSN	IKSFYY	QRSQVELPERLA
E9NSN8	FIV.AEHP	YRELTRKA	LRAFYY	NRASMDIVEPYA
E9NSR0	FVV.NPAA	LRDISHAS	LKFFYL	MRTGPIEKEYA
P77864	LVV.KSQY	YEDIVKAS	IKWFYY	QRASMALESQYA
D9S4N9	LVV.KSQY	YEDIVKAS	IKWFYY	QRASMALESQYA
A7UG67	LKI.ADKT	FEDVTKAA	LKWFYY	QRASMELEEQA
Q59442	LKI.ADKV	FEDVTKAS	LKWFYY	QRASMALEETYA
E9NSH8	LKI.ADKV	FEDVTKAS	LKWFYY	QRASMALEEQYA
E9NSM0	FVIGTNIH	YKEFATWT	IKAYY	QRASSTPIESRYA
Q11VL4	FQI.SNQV	NLTVGKAS	LGFLLY	QRASSTALPAQYA
GH9b_CD_without_signal_peptide_and_first_Met	FVI.ADDP	YALGKAV	LKAYY	LRCSSEPLPAYA
Q308B8	FHI.QENV	FDFVLA	AAIKFY	NRASAPIDADYA
Q5NJL8	FEI.SEEV	LTEVSRSA	LKAYY	NRASSTEITEPYA
Q9APG3	FVV.AQDP	YRELNKAV	IKAYY	NRASCTALEPQYA
Q308B7	FVV.DAGA	YDVGATGA	LKAFYH	NRASCVLEPAHA
Q9RBJ4	FPI.AASA	YQPVVDAS	LKAFYY	NRASSTELPAQFA
A0A0H2X852	FPI.AASA	YQPVVDAS	LKAFYY	NRASSTELPAQFA
H9L4N3	FPI.AASA	YQPVVDAS	LKAFYY	NRASSTELPAQFA
Q308B9	FTI.AENA	YESLLAAS	IKAFYH	NRSGTELEEEHA
D8VN24	FTI.ANDV	YSALTAAS	IKAFYH	NRSSAEELLATHA
Q8RR29	.AKNSSYD	YGDALAKS	LLFYQL	QESGKL.SE.ET
Q402U6	.AAAEKYD	YGDALAKS	LLFYQL	QOEAETM.SE.ET
D4LDI8	.SAANTYN	YVEAMQKS	LFYVQV	QSGPL.A...D
D4LFJ4	.GAAADIN	YATALQMS	LYFYEC	QQAQHL.P...A
Q38890	.KTPPPDN	YTLALHKA	LKFFNA	QRSQGL.PK
G0ZTA3	.SAPPPDS	YTKALHKA	LMFFNA	QRSQGL.PK
O04890	.HNPPPDN	YTLALRKA	LMFFNA	QRSQGL.PK
Q6X680	.RHSPPDN	YTLALHKA	LMFFNA	QRSQGL.PK
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Q6DDM4	.SHAPADN	YTLALHKA	LMFFNG	QRSQGL.PK
Q5NAT0	.GGGGGHD	YGMALSKS	LLFYEA	QRSQVLP.G
Q8LJP6	.SAFAGHD	YNOALSKS	LLFFEA	QRSQYL.PH
Q93WY9	.VALASHN	YGEALSKS	FLFYEA	QRSQYL.PH
Q9ZSP9	.VALASHN	YGEALSKS	FLFYEA	QRSQYL.PR
P22503	.SGPPNYD	YADALAKA	LLFFEG	QRSQGL.PS
Q42871	.GPIIAQD	YNDLSLGA	LLFFEG	QRSQGL.PV
O04972	.LGTAQFD	YRDALAKS	LLFFEG	QRSQGL.PP
Q93WZ1	.TAQGVFN	YREALEKS	LLFFEG	QRSQGL.PH
Q0H8W0	.TAQGVFN	YREALEKS	LLFFEG	QRSQGL.PH
Q41012	.NVECKPN	YREALEKS	LLFFEG	QRSQGL.PP
Q6DDM3	.FVQAKPN	YNEALAKS	LLFFEG	QRSQGL.PG
Q93WZ0	.CSAGGHD	YRDALRKS	LLFFEG	QRSQGL.PP
Q42872	.SFGGGHD	YHDALRKS	LLFFEG	QRSQGL.PP
Q9ZTL0	.PIRAGHD	YHDALRKS	LLFFEG	QRSQGL.PH
Q9CAC1	.IYSAGHD	YRDALRKS	LLFFEG	QRSQGL.PP
O82473	.FAFTSQD	YSNALDKS	TRFFEG	QRSQGL.PA
P94114	.SAFTPPQD	YSDALEKS	LLFFEG	QRSQGL.PA
Q9XIY8	.TAFTSQD	YADALEKS	LLFFEG	QRSQGL.PV
Q40763	.FAFTSQD	YANALEKS	LLFFEG	QRSQGL.PS
Q9AVI5	.FAFTSQD	YANALEKP	LLFFEG	QRSQGL.PS

Q9SRX3 .HHLDNHN YKDALSKS ILFFEG QRS GKL.PP NQRMTR RSNGLSDG
Q42875 .PRFASHN YRDALAKS ILYFEG QRS GKL.PS SQRTWR KDSGLSDG
D4LD59 .SAGDTDN YAKLLQYS MYFYDANMCG SQ.VA.E KSGMTR GNCHTSDS
D4L9U6 .ASGFDAN FAKLLQYS IYFYDANMCG TD.VS.E NNRLNWR GDCHTYDA
Q0PRM9 .AAGTEYN YAKLLQYS QYFYDANMCG TG.VG.E NNQYTR RNDCHYDA
A3DJ82 .SAAGEYN YAKALQYS MFFYDANMCG TG.VD.E NSLLSWR GDCHVYDA
Q8VV73 .SAAGEYN YAKALQYS MFFYDANMCG TG.VD.E NSLLSWR GDCHVYDA
D4LBQ2 .YDDVEIN FAKALQYS LYFYDANMCG GP.I.T GGNEWLW GDCHVEDA
B8I2K6 .ENFNRYFN FAEALQKS LYFYDAEKCGEE.AGYDK GGRLEWR GSCHEGDA
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B8I7V7 .STTPPFN YAEAFQKS LYFYDAEKCGPG.V.T GGKLEWR GDCHVEDC
Q9EYQ4 .STTPPFN YAEAFQKS LYFYDAEKCGPG.V.T GGKLEWR GDCHVEDC
Q55365 .IANGDHN YGEALQKS FLFYEANRS GDL.DE.S TKRIDWR GDSGLRDG
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D9SS68 .AAAPKFD YSDFGKKS IMFYEANWSGKV.E NNRFDWR GDAFLKDG
B8I0N0 .AEENNFN YVDAFAKS ILFYEANWCGPD.AG NNRIKWR GPCHCDDG
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F2Z7L1 .SCHAQYN YREVLQKS ILFYEA QRS GQL.PG NNPIDWR DDSA LDDQ
I2F181 .GVAGQYN YDEVLEKS ILFYEA ERS GDL.PA NNRIYR GDSALGGQ
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P22699 .LINADTD YCSLLENA LMFYKMNRA GRL.P DNDIPWR GNSALNDA
P37700 .YAAGTYN YGEALQKS IMFYEF QRS GDL.PA DKRDNRW DDSG MKDG
O65987 .TATPTFN YGEALQKS IMFYEF QRS GKL.PT DIRSNWR GDSG TKDG
Q02934 .PATGAFN YGEALQKA IFFYEC QRS GKLDPS TLRNLWR GDSG LDDG
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GH9e_CD NYAEALQKS LLYFEA QRS GKL.PS TNRVNWR GDSGLNDG
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Q9RAI8 .SAKESQN YAEALQKS ILFYEA QRS GKL.PE SSRLNWR GDSALEDDG
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P71140					SGKKDPI	DITKGYDA	GDVSKY	VNAG					
Q9AOF4					SGTQPAR	EITKGYDA	GDVSKY	INNG					
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B8I7X6					NGQHSIK	DGGKGWHD	GDYKYY	VVNA					
W8PF21					DPFYRAGTRL	EATGGWHD	GDYKYY	VTTT					
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P23658					DVEPV	DVTGGWHD	GDYGRY	STAG					
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C8WSJ6					TERALACP	GGWHD	GDYKYY	TVPA					
Q9AJS0					TERALACP	GGWHD	GDYKYY	TVPA					
F8IJE7					AEHAV	ACPGWHD	GDYKYY	TVPA					
D7PC10					PSRRI	DCHGGWHD	GDYKYY	VVPA					
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E9NSJ5					TDKKI	DVSGGWHD	GDYGRY	VVPG					
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C5HG55					INVCWSG	TCNYSLN	VSKGWYDA	GDHGKY	VVNG				
P10476					MNVPCWSG	TCNYSLN	VTKGWYDA	GDHGKY	VVNG				
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Q9LAJ2		S			STDSPWYKENYSL	EVTGGWYDD	TRYNK	SIVNG					
Q9RGE8		S			SSDSPWYKENYSL	DVTGGWYDA	GDHGKY	VVNG					
H9TUL5		S			DADGQTWDGCDYRL	NVRGGWYDA	GDYKYY	VVNG					
F4YTG7					DSAGQNWTPC	EYTL	DASGGWYDA	GDYKYY	VVNG				
GH9f_CD					RGSGCDYTL	DVAGGWYDA	GDHGKY	VVNG					
Q6RSN8					TNVPTWPQDDEYAGIPQKNYTK	DVTGGWYDA	GDHGKY	VVNG					
A3DCH2					TNVPTWPQDDEYAGIPQKNYTK	DVTGGWYDA	GDHGKY	VVNG					
Q59325					TNVPTWPQDDEYAGIPQKNYTK	DVTGGWYDA	GDHGKY	VVNG					
A3DCH1					TNVPTWPQDDEYAGRPQKYTK	DVTGGWYDA	GDHGKY	VVNG					
Q69308					TNVPTWPQDDEYAGRPQKYTK	EVTGGWYDA	GDHGKY	VVNG					
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C9RJ28					T	ME	RAGLW	NAHGGWYDA	GDYKYY	IVNG			
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E9NSR0					S		AASQGRPAGSVI	SSP	LGWYDA	GDYKYY	VVNS		
P77864					S		TG	ASGTINS	SKGWYDA	GDYGRY	IVNS		
D9S4N9					S		TG	ASGTINS	SKGWYDA	GDYGRY	IVNS		
A7UG67					S		TG	ASGTI	QSSKGWYDA	GDYGRY	IVNS		
Q59442					S		TG	ASGTI	QSSKGWYDA	GDYGRY	IVNS		
E9NSH8					S		TG	ASGTI	QSSKGWYDA	GDYGRY	IVNS		
E9NSM0					S			ASGESRKTESI	SSPK	GWYDA	GDYKYY	VVNA	
Q11VL4					S			AATATRPEGTI	KINS	SKGWYDA	GDYKYY	IVNS	
GH9b_CD_without_signal_peptide_and_first_Met					S			ASPWRPMTI	HIS	APGGWYDA	GDYKYY	IVNS	
Q308B8					S			AASAARPA	GIV	SSPK	GWYDA	GDYKYY	SVNS
Q5NJL8					S			AATEHRP	VGYTF	SSSK	GWYDA	GDVSKY	IVNS
Q9APG3					S			AASAARPA	ESVI	SSP	QGWYDA	GDYKYY	IVNS
Q308B7					S			AASPQRP	AGSHI	SAP	RGWYDA	GDYKYY	VVNS
Q9RBJ4					S			AASATRP	ANSVI	SAP	KGWYDA	GDYKYY	IVNS
A0A0H2X852					S			AASATRP	ANSVI	SAP	KGWYDA	GDYKYY	IVNS
H9L4N3					S			AASATRP	ANSVI	SAP	KGWYDA	GDYKYY	IVNS
Q308B9					S			AASAARPA	GPTI	SSPK	GWYDA	GDYKYY	IVNS
D8VN24					S			AASAARPA	GPTI	SSPK	GWYDA	GDYKYY	IVNS
Q8RR29								YGI	DLSGGWYDA	GDVSKY	NLPA		
Q402U6								VGL	DLSGGWYDA	GDNAK	NLPM		
D4LDI8									VTGGWYDA	GDHKKF	ALTN		
D4LFJ4									IDGGWYDA	GDHVKF	NLPM		
Q38890								GSFYK	DLVGGYDA	GDVSKY	NLPM		
G0ZTA3								GAAHAS	LVGGYDA	GDVSKY	NLPM		
Q04890								STMFKN	LVGGYDA	GDVSKY	NLPM		
Q6X680								SVLMK	DLVGGYDA	GDVSKY	NLPM		
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Q6PW04								SVLMK	DLVGGYDA	GDVSKY	NLPM		
F1BWZ3								SVLMK	DLVGGYDA	GDVSKY	NLPM		
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Q5NAT0								NGV	DLVGGYDA	GDVSKY	NLPM		
Q8LJP6								SGV	DLVGGYDA	GDVSKY	NLPM		
Q93WY9								SGV	DLVGGYDA	GDVSKY	NLPM		
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P22503								QNVN	LMGGYDA	GDVSKY	NLPM		
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Q93WZ0								AGV	DLTGGYDA	GDVSKY	NLPM		
Q42872								AGV	DLTGGYDA	GDVSKY	NLPM		
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Q9XIY8								YHV	LVGGYDA	GDVSKY	NLPM		
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Q9AVI5								YHV	NLVGGYDA	GDVSKY	NLPM		

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D4LD59	VDCGFHDA	GDHAIKF	GLPQ		...
D4L9U6	QVPMDTEHTNLSAFLTANKDYLDPPDGDGFI	DVHGGFHDA	GDHVKF	GMPE	...
Q0PRM9	KLPLDSKNTNMSDGFIRQNKSVLDPDGDGMV	DVSGGFHDA	GDHVKF	GMPE	...
A3DJ82	RLPLDSQNTNMSDGFISSNRSVLDPPDGDGKV	DVSGGFHDA	GDHVKF	GLPE	...
Q8VV73	RLPLDSQNTNMSDGFISSNRSVLDPPDGDGKV	DVSGGFHDA	GDHVKF	GLPE	...
D4LBQ2	TIPLKPMG	EDFKQNTNLSQEFIDEHKDLLDPPDGDGLI	DCSGGMHDA	GDHVKF	CLPG	...
B8I2K6	KIPLKNTNLSAAAFIEKYKSILDPDGDGTV	DVHGGFHDA	GDHVKF	GLPQ	...
Q50HR0	AVPLIPMESKESPGTNMSQAFIDKYREFLDPDNGTLDQGGGMHDA	GDHVKF	GLPQ		...
B8I7V7	ELPLIPMKDYVGTNMSQAFIDKNKAFLDPPDGNLSL	DLHGGFHDA	GDHVKF	GLPQ	...
Q9EYQ4	ELPLIPMKDYVGTNMSQAFIDKNKAFLDPPDGNLSL	DLHGGFHDA	GDHVKF	GLPQ	...
Q55365	RDGIYFGGQSSGNLQAGLSL	DLTGGYHDA	GDHGKF	GLPL	...
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B8I7V9	SDVGV	DLTGGYHDA	GDHVKF	GLPQ	...
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Q9RGE6	ADVGL	DLSGGFHDA	GDHVKF	GLPQ	...
D9SS68	ADVGL	DLSGGFHDA	GDHVKF	GLPQ	...
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E0RQU2	ADVGL	DLTGGFHDA	GDHVKF	GLPQ	...
Q97KK3	KDVGL	DLTGGFHDA	GDHVKF	GLPQ	...
A5A7P3	GNNNE	DLTGGYHDA	GDHVKF	GLPM	...
F2Z7L1	GNGGE	DLTGGYHDA	GDHVKF	GLPM	...
I2F181	GNQGG	DLTGGYHDA	GDHVKF	GFFM	...
Q9Y0W2	SDVGH	DLTGGYHDA	GDHVKF	GFFM	...
Q86GS4	SDVGH	DLTGGYHDA	GDHVKF	GFFM	...
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Q9NCE2	GQNGE	DLTGGYHDA	GDYVKF	GFFM	...
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O77044	GDQQQ	DLTGGYHDA	GDYVKF	GFFM	...
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Q9BLD3	GQKGE	DLTGGYHDA	GDYVKF	GFFM	...
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Q9BLD1	GQKGE	DLTGGYHDA	GDYVKF	GFFM	...
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Q9U901	GQKGE	DLTGGYHDA	GDYVKF	GFFM	...
Q64I76	GQKGE	DLTGGYHDA	GDYVKF	GFFM	...
O76130	GQKGE	DLTGGYHDA	GDYVKF	GFFM	...
Q9BMC7	GNNGE	DLTGGYHDA	GDYVKF	GFFM	...
S5TE16	GNNGE	DLTGGYHDA	GDYVKF	GFFM	...
D2X8D7	GDNGE	DLTGGYHDA	GDYVKF	GFFM	...
A0SGJ6	GDGGV	DLTGGYHDA	GDYVKF	NFFM	...
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A0SGJ5	GNAGE	DLTGGYHDA	GDYVKF	NFFM	...
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Q86M37	GDNGE	DLTGGYHDA	GDHVKF	SLPM	...
Q75UN9	GDNGE	DLTGGYHDA	GDHVKF	SLPM	...
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P22699	SPNSAKDANGDGNLSGGYFDA	GDGVKF	GLPM		...
P37700	SDVGV	DLTGGYHDA	GDHVKF	NLPM	...
O65987	SDVGV	DLTGGYHDA	GDHVKF	NLPM	...
Q02934	KDAGI	DLTGGYHDA	GDHVKF	NLPM	...
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B9MKU5	KDVGL	DLTGGYHDA	GDHVKF	NLPM	...
E4S8G9	KDNKI	DLTGGYHDA	GDHVKF	NLPM	...
P22534	QDNGL	DLTGGYHDA	GDHVKF	NLPM	...
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Q70DK3	SDVGL	DLTGGYHDA	GDHVKF	NLPM	...
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P23659	ADVGL	DLTGGYHDA	GDHVKF	NLPM	...
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P26221	ADVGL	DLTGGYHDA	GDHVKF	GFFM	...
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G4XKY7	ADVGL	DLTGGYHDA	GDHVKF	GFFM	...
Q3ZMA8	SDVGV	DLTGGYHDA	GDHVKF	GFFM	...
P26225	ADVGV	DLTGGYHDA	GDHVKF	GFFM	...
F4H3U7	ADVGV	DLTGGYHDA	GDHVKF	GFFM	...
GH9c_CD	SDVGH	DLTGGYHDA	GDHVKF	GLPM	...
GH9e_CD	KDVGL	DLTGGYHDA	GDHVKF	GLPM	...
W8PWF7	ADVGL	DLTGGYHDA	GDHVKF	GLPM	...
Q9Z4I1	ADVGV	DLTGGYHDA	GDHVKF	GFFM	...
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P28622	KDVGH	DLTGGYHDA	GDHVKF	GLPM	...
Q9R9H6	KDVGH	DLTGGYHDA	GDHVKF	GLPM	...
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Q9SRX3	AF	T	T	M	L	S	W	S	L	I	E	F	G	G	L	M	K
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D4LD59	GY	T	A	S	T	L	G	W	G	Y	Y	F	K	D	S	Y	D
D4L9U6	NY	S	A	A	T	V	G	W	G	Y	Y	F	R	D	A	Y	A
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A3DJ82	AYA	A	S	T	V	G	W	G	Y	Y	F	K	D	Q	F	R	A
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D4LBQ2	SYA	A	S	T	V	G	W	G	Y	Y	F	R	D	A	Y	V	K
B8I2K6	SY	T	A	G	T	L	G	W	G	F	Y	F	R	D	S	Y	K
Q50HR0	GYA	A	S	T	L	E	W	G	F	Y	F	R	Q	A	F	I	D
B8I7V7	GY	T	I	S	T	L	G	W	G	F	Y	F	K	D	S	F	T
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B8I7V9	GY	S	A	A	I	L	G	W	S	L	Y	F	K	E	S	F	D
Q9EYQ2	GY	S	A	A	I	L	G	W	S	L	Y	F	K	E	S	F	D
Q9RGE6	AYA	A	S	T	L	G	W	G	Y	F	A	F	K	D	A	Y	K
D9S568	AYA	A	S	T	L	G	W	G	Y	F	A	F	K	D	A	Y	K
B8I0N0	CAS	A	S	T	L	A	W	A	Y	Y	F	E	D	V	F	I	D
E0RQU2	AYA	A	S	T	L	G	W	A	Y	Y	F	K	D	V	F	E	V
Q97KK3	AYA	A	S	T	L	G	W	A	Y	Y	F	K	D	S	F	V	K
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F2Z7L1	AW	T	A	T	L	I	W	G	M	I	D	L	A	N	G	Y	G
I2F181	AF	A	T	T	L	A	W	G	I	L	E	F	R	D	G	Y	E
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Q9BLD3	AY	T	V	T	V	L	A	W	G	L	V	D	Y	E	S	A	Y
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Q9U901	AY	T	V	T	V	L	A	W	G	V	I	D	Y	E	S	A	Y
Q64I76	AY	T	V	T	V	L	A	W	G	V	I	D	Y	E	S	A	Y
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S5TE16	AY	T	A	T	V	L	A	W	G	L	V	D	Y	E	A	G	Y
D2X8D7	AY	T	A	T	V	L	A	W	G	L	V	D	Y	E	A	G	Y
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M9QQR8	S	S	T	S	T	V	L	L	W	G	Y	L	W	K	D	A	Y
P22699	AY	S	M	T	M	L	G	W	S	F	I	E	Y	E	S	N	I
P37700	SY	T	S	A	M	L	A	W	S	L	Y	E	D	K	D	A	Y
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P96311	SY	T	G	T	M	L	S	W	A	V	Y	E	Y	K	D	A	F
B9MKU7	SY	T	G	T	M	L	S	W	A	V	Y	E	Y	K	D	A	F
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A9KT90	AY	T	V	T	M	L	A	W	A	V	Y	E	E	E	A	T	L
P23659	AY	S	Q	T	M	L	A	W	A	A	Y	E	A	E	E	A	L
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A3DD31	AY	S	A	A	M	L	G	W	A	L	Y	E	Y	G	D	D	I
Q9AJF8	AY	S	A	A	M	L	G	W	A	L	Y	E	Y	G	D	D	I
G8LXR4	SY	S	A	S	M	L	G	W	A	L	Y	E	Y	G	D	K	I
Q9L3J5	SYA	A	G	Q	L	G	W	A	V	Y	E	Y	R	Q	A	F	E
Q0PRN4	SYA	A	G	Q	L	G	W	A	V	Y	E	Y	R	D	A	F	E
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Q47MW0	AF	T	A	T	M	L	A	W	G	A	I	E	S	P	E	G	Y
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Q3ZMA8	AF	T	T	M	L	A	W	G	A	V	E	S	P	A	G	Y	T
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F4H3U7	AF	S	A	T	M	L	A	W	G	A	I	E	S	P	T	G	Y
GH9c_CD	AA	S	A	S	A	T	M	I	A	W	G	V	V	E	Y	R	D
GH9e_CD	AA	S	T	T	M	L	A	W	G	A	V	E	Y	R	D	A	Y
W8PWF7	AF	S	V	T	M	L	A	W	G	V	A	D	Y	R	Q	A	Y
Q9Z4I1	AA	S	A	T	M	L	A	W	S	V	V	E	Y	A	D	G	Y
Q5YLG1	AY	S	A	A	V	L	A	W	T	V	Y	E	Y	R	E	A	Y
P28622	AY	S	A	A	V	L	A	W	T	V	Y	E	Y	R	E	A	Y
Q9R9H6	AY	S	A	A	V	L	A	W	T	V	Y	E	Y	R	E	A	Y
A6Y862	AY	S	A	A	V	L	A	W	T	V	Y	E	Y	R	E	A	Y
Q9RAI8	AY	S	A	A	V	L	S	W	S	V	Y	E	Y	R	D	A	Y
Q6SYB5	AY	S	A	A	I	L	S	W	S	V	Y	E	Y	R	D	A	Y

Q9SRX3	SELPN	AKDA	IRWAT	DFFL	LKAT	.SHP	D	TIYVQVGD	PN	MD
Q42875	GLLN	AKQA	IGWAT	EYLL	LKAT	.AHP	D	TIYVQVGD	AG	SD
D4LD59	GLTE	HYRT	IADY	FAAF	FRNK	STKLSG	DSVSSFCY	QLGDD	GN	VD
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Q0PRM9	GQDS	HIKT	ILRY	FNDY	FMNS	TFLDLS	TGKAIAFCY	QVGGD	GD	VD
A3D382	GQAV	HAEVI	LRYFN	DYFM	RC	TFRDA	SGNVVAFCH	QVGGD	GD	ID
Q8VV73	GQAV	HAEVI	LRYFN	DYFM	RC	TFRDA	SGNVVAFCH	QVGGD	GD	ID
D4LBQ2	GTQE	HVED	ILHWF	DNFY	MK	STYLDE	NGEVVAYCY	QVGGD	GN	ID
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Q50HR0	GLED	HMIET	ILRW	FTDY	FLK	STYMDA	DGNVIAFCY	QVGGD	GD	VD
B8I7V7	NEED	HIRDI	LKWGN	DYFL	RC	STFMDN	KGEVVAFCY	QVGGD	GT	VD
Q9EYQ4	NEED	HIRDI	LKWGN	DYFL	RC	STFMDN	KGEVVAFCY	QVGGD	GT	VD
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A4PCG1	GQMD	DDLAT	IRWGT	DYLL	LKAH	VTNA	NGETVFFVA	QVGNAS	AD
B8I7V9	GNTTK	MLQO	LKYFT	DYFL	LK	SHPN	STTFYYQV	GGD	GN	AD
Q9EYQ2	GNTTK	MLQO	LKYFT	DYFL	LK	SHPN	STTFYYQV	GGD	GN	AD
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D9SS68	GQDAY	MLKI	LKHFT	DYFL	LK	CYPD	NNTFYQV	GGD	GD	LD
B8I0N0	GQDGY	MLNI	LKHFC	DYFM	K	CFFN	KTTFYYQV	GGD	GD	VD
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I2F181	GQYNL	ALDS	IRWTL	NYFL	LK	AHVSD	NEFYGQV	GGD	GN	TD
Q9Y0W2	GQTSY	GHAAL	LKWAT	DYFL	LK	AHTAT	NEFYGQV	GGD	GN	TD
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S5TE16	GALDD	GRKA	VKWAT	DYFL	LK	AHTAA	SEFYGQV	GGD	AD	VD
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D4L9U6 HAYWQ..APEIDTM.....DRPA.FFLTG..DKPQTDYVASA AAASLA INYLNFKD
Q0PRM9 HAYWQ..APEVDEM.....FRRG.WFATD..EMPS TDCVAAA AAASLA VNYMNFKD
A3DJ82 HAFWG..APENDM.....FRRG.WFITK..EKPGTDIISAT AAASLA INYMNFKD
Q8VV73 HAFWG..APENDTM.....FRRG.WFITK..EKPGTDIISAT AAASLA INYMNFKD
D4LBQ2 HNYWI..APELQENLLD.....FARPA.YFATT..ETPA SDM CAGT AAASLA INYLNFKD
B8I2K6 HCYWG..PPELYPEEY.Q.....KSRPA.DFATA..ETPG SDV CAST AAALC TSYLNFKD
Q50HR0 HSYWG..PPELQQQ.....VPRPA.FFATS..ENPAD QCCANV SAALS ISYLNFKD
B8I7V7 HAWWQ..PPELNKKS..E.....VPRPA.FFATS..ETPA SDQ CGEA AAASLA INYLNFKD
Q9EYQ4 HAWWQ..PPELNKKS..E.....VPRPA.FFATS..ETPA SDQ CGEA AAASLA INYLNFKD
Q55365 HSLWS..APESQTI.....ARPA.MAVTA..NKPG SDV AAGS AAALA AASI LFRE
A4PCG1 HSLWS..APESQTI.....ARPA.MAVTA..NKPG SDV AAGS AAALA AASI LFRE
B8I7V9 HTYWG..APEEQTG.....QRPSL YKADP..SSPA SDI LSET SAALT LMYLNYKN
Q9EYQ2 HTYWG..APEEQTG.....QRPSL YKADP..SSPA SDI LSET SAALT LMYLNYKN
Q9RGE6 HAYWG..PPEIQPT.....ARPTK FKATP..SDPA SDV CGNT AAALA IMYLNFKD
D9SS68 HAYWG..PPEIQPT.....ARPTK FKATP..SDPA SDV CGNT AAALA IMYLNFKD
B8I0N0 HOYWG..PPELQTY.....DRPAY YVATP..SNPG SDV AGDA AAALA LMYLNYKD
E0RQU2 HSYWG..PPELQDT.....DRPAL YVATP..ETPA SDI IAGT AAALA LMYLNYKD
Q97KK3 HSYWG..PPELQTLDI.....TTRPTL YAAATP..DKPA SDV CGST AAALA LMYINFKD
A5A7P3 HAYWG..RPEEMT..MD.....RPA.VKITT..SKPG SDV AGET SAALA AASI VFKN
F2Z7L1 HAYWG..RPEEMT..MD.....RPA.WSLTP..SRPG SDI LAGT AAALA AGSILFSD
I2F181 HAYWG..RPEDMT..ME.....RPA.WSISP..SAPG SDI LAET AAALA AGYL VFRD
Q9Y0W2 HAYWG..RPEDMT..MS.....RPS.YKIDQ..SRPG SDI LAGT AAALA AASI VFKS
Q86GS4 HAYWG..RPEDMT..MS.....RPS.YKIDQ..SRPG SDI LAGT AAALA AASI VFKS
A8CYP6 HSWWG..RPEDMN..MD.....RPA.YKIDT..SRPG SDI LAET AAAMA AASI VFKN
Q9NCE2 HNSWG..RPEDMT..ME.....RPA.YKIDE..QNPGT ELAAET AAALA AASI VFKS
Q9NCE3 HNSWG..RPEDMT..ME.....RPA.YKIDA..QHPGT ELAAET AAALA AASI VFKS
Q8IFU3 HAYWG..RPEDMT..MA.....RPA.YKIDT..SRPG SDI LAGT AAALA AASI VFKS
Q8IFU2 HAYWG..RPEDMT..MA.....RPA.YKIDT..SRPG SDI LAGT AAALA AASI VFKS
Q8IFU6 HAYWG..RPEDMT..MA.....RPA.YKIDT..SNPG SDI LAGT AAALA AASI VFTS
Q8IFU5 HAYWGWGRPEDMT..MA.....RPA.YKIDT..SRPG SDI LAGT AAALA AASI VFTS
Q8IFU4 HAYWG..RPEDMT..MA.....RPA.YKIDT..SNPG SDI LAGT AAALA AASI VFTS
O77044 HAFWG..RPEDMT..MA.....RPA.YKIDT..SRPG SDI LAGT AAALA AASI VFRN
O77045 HAYWG..RPEDMT..MA.....RPA.YKIDT..SRPG SDI LAGT AAALA AASI VFKN
Q9BLD3 HAYWG..RPEDMT..MS.....RPA.YKIDT..SKPG SDI LAET AAALA ATAI AYKS
Q9BH22 HAYWG..RPEDMT..MS.....RPA.YKIDT..SKPG SDI LAET AAALA ATAI AYKS
Q9BLD1 HAYWG..RPEDMT..MS.....RPA.YKIDT..SKPG SDI LAET AAALA ATAI AYKS
Q9BLD2 HAYWG..RPEDMT..MS.....RPA.YKIDT..SKPG SDI LAET AAALA ATAI AYKS
A0A1V1FNA0 HAYWG..RPEDMT..MS.....RPA.YKIDT..SKPG SDI LAET AAALA ATAI AYKS
Q9U901 HAYWG..RPEDMT..MS.....RPA.YKIDT..SKPG SDI LAET AAALA ATAI AYKS
O64176 HAYWG..RPEDMT..MS.....RPA.YKIDT..SKPG SDI LAET AAALA ATAI AYKS
O76130 HAYWG..RPEDMT..MS.....RPA.YKIDT..SKPG SDI LAET AAALA ATAI AYKS
Q9BMC7 HAYWG..RPEDMT..MA.....RPA.YKIDA..SRPG SDI LAGT AAALA AASI VFKG
S5TE16 HAYWG..RPEDMT..MD.....RPA.YKIDA..AHPGT ELAAET AAALA AASI VFRG
D2X8D7 HAYWG..RPEDMT..MA.....RPA.YKIDA..ARPG SDI LAGT AAALA AASI VFKG
A0SGJ6 HGSWG..RPEDMK..MA.....RPA.FKVIDA..SRPG SEVAMET AVAFV TGH LAFKE
A0SGJ9 HGSWG..RPEDMK..MA.....RPA.FKVIDA..TKPG SEVAMET AVAF AAGHL AFKE
A0SGJ5 HGSWG..RPEDMK..MA.....RPA.FKVIDA..SKPG SEVAMET AVAF AAGHL AFKE
A0ZT16 HSFWG..RPENMN..MN.....RPA.FKVTI..TCKG SDV AGDT VSA LA AGYL VFKD
Q86M37 HHFWG..RAEDMK..MA.....RPA.YKLTTP..SKPG SDV VAGEI AASLA AGYL AFKQ
Q75UN9 HHFWG..RAEDMK..MA.....RPA.YKLTTP..SKPG SDV VAGEI AASLA AGYL AFKQ
M9OQR8 HHFWG..RAEDMK..MA.....RPA.YKLTTP..SKPG SDV VAGEI AASLA AGYL ALKQ
P22699 HSWWG..PPEEDT..MA.....RPT.YMLTT..EAPG TEIAMEA SAALA AASI AFKS
P37700 HSWWG..PAEVMQ..ME.....RPS.FKVIDA..SKPG SAVCAST AAASLA SAAV VFKS
O65987 HKWWG..PAEVMQ..MA.....RPA.YKVDL..QKPG SSVVAET AAALA STAF ALKD
Q02934 HAWWG..PAEVMQ..ME.....RPS.YKVDL..QKPG SSVVAET AAALA STAF ALKD
Q9L3J8 HAWWG..PAEVMQ..ME.....RPS.YKVDL..QKPG SSVVAET AAALA STAF ALKD
B9MKU5 HNFWG..PAEVMQ..MK.....RPA.YKCDL..NNPA SSVVAET AAASLA AASI VIRE
E4S8G9 HAWWG..PAEVMQ..ME.....RPS.YKVTK..TNPST VVAET AAALA AGSIVLKQ
P22534 HAWWG..PAEVMQ..ME.....RPS.FKVTQ..SSPG SAVVAET AAASLA AASI VLKD
P96311 HAWWG..PAEVMQ..ME.....RPS.FKVTQ..SSPG STVVAET AAASLA AASI VLKD
B9MKU7 HAWWG..PAEVMQ..ME.....RPS.FKVTQ..SSPG STVVAET AAASLA AASI VLKD
A3DCY5 HRWWV..PAECIDVQAP.....RPS.YKVDL..SNPG STV TAGT AAALA ATAL VFKD
Q70DK3 HRWWV..PAECIDVQAP.....RPS.YKVDL..SNPG STV TAGT AAALA ATAL VFKG
A9KT90 HSWWG..PAEVMQ..MA.....RPS.YKVDL..NNPG STV VGEA AAALA ATAL IYKT
P23659 HSWWG..PAEVMQ..MD.....RPA.YKVDL..ANPG STV VGEA AAALA SAAV VFAD
D9SRK9 HSWWG..SAEVMQ..MA.....RPS.FKVDL..ANPG SAVVGT AAALA AASI IFKD
P26224 HSWWG..PAEVMQ..MP.....RPS.FKVDL..TNPST VVAET AAAMA AASI VFKP
E0RQU1 HSWWG..PVEVIHQQA.....GNRPA.YSA...SHGL SAVMAQT AAALALGY IYFGD
A3DD31 HKWWG..SAEVIEKEMT.....RPY.F.....VGKGS AVVGM AAALA VGSIVLKN
Q9AJF8 HKWWG..SAEVIEKEMT.....RPY.F.....VGKGS AVVGM AAALA VGSIVLKN
G8LXR4 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
Q9L3J5 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
Q0PRN4 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
B8I7V6 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
Q9EYQ5 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
P26221 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
Q47MW0 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
G4XKY7 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
Q3ZMA8 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
P26225 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
F4H3U7 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
GH9c_CD HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
GH9e_CD HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
W8PWF7 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
Q9Z4I1 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
Q5YLG1 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
P28622 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
Q9R9H6 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
A6Y862 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
Q9RAI8 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD
Q6SYB5 HSWWG..PVEVIKEME.....RPY.F.....TGKPT CVTAQM AAALA IGSIVLKD

B0FWI3
C9RJA3
Q6LUT2
Q9KUA8
Q11VF8
B8I6V7
A3DD30
P71140
Q9A0F4
A3DDN1
B8I7X6
W8PF21
D9ZF47
P23658
B8I4R4
A0A346PYQ5
C8WSJ6
Q9AJS0
F8IJE7
D7PC10
B7U9C9
H2BNN6
A9UGW3
E9NSJ5
Q6DTY2
D4LAY7
D4LDI9
Q9Z3X7
P14090
Q05156
Q47PF7
Q08166
GH9d_CD
GH9a_CD
C5HG55
P10476
B8I7V4
Q46002
Q9LAJ2
Q9RGE8
H9TUL5
F4YTG7
GH9f_CD
Q6RSN8
A3DCH2
Q59325
A3DCH1
Q69308
P0C2S1
Q59444
C9RJ28
E9NSN8
E9NSR0
P77864
D9S4N9
A7UG67
Q59442
E9NSH8
E9NSM0
Q11VL4
GH9b_CD_without_signal_peptide_and_first_Met
Q308B8
Q59JL8
Q9APG3
Q308B7
Q9RBJ4
A0A0H2X852
H9L4N3
Q308B9
D8VN24
Q8RR29
Q402U6
D4LDI8
D4LFJ4
Q38890
G0ZTA3
O04890
Q6X680
Q2UZT3
Q6PW04
F1BWZ3
D3JWK8
Q6DMM4
Q5NAT0
Q8LJP6
Q93WY9
Q9ZSP9
P22503
Q42871
O04972
Q93WZ1
Q0H8W0
Q41012
Q6DMM3
Q93WZ0
Q42872
Q9ZTL0
Q9CAC1
Q82473
P94114
Q9XIY8
Q40763
Q9AVI5

180

190

200

... K . GDFTSEQY LAAAEKAYKHLSEKQSV
... K . GDFTSEQY LAAAEKAYKHLSEKQSV
... SR . IPQC . GDIKADTY LEAAKKGYWHLEKMNH
... H . GEFTQADY LQAAENGYWHLEKHNH
... AY . ADLC LVHAKYAYDYAKTKTST V
... AF . ALKC LNAAKSAWYLEKNPSN I . K
... DF . AQEC LDAAINAWKFLLEKNPEN I . V
... DF . AQEC LDAAINAWKFLLEKNPEN I . V
... TF . ANKC LEAAKSAWYLEKNPTN I . V
... QY . AEKC INAAKVSYEFLKNNPAN VF . ANQ
... AY . ADKC IAAAKVSYAFLKANPWN TK . PDQ
... AF . ARKA LAAAEQAWRFLAASGPI . LDY . PAE
... AEA EDAAVRAWDLMOHPQI . IGF . ENP
... EY . ADKL MQKSLLAYKWLLDNPDE . LLF . FNP
... VF . SQNC LQASQKAWELLEKNKDF . VSF . KNP
... EF . CQKA ISAAEKAWIWLINPDR . EGF . KNP
... AL . SSCC ADAARRAYAWLGAHEMQ . P . F . HNP
... AL . SSCC ADAARRAYAWLGAHEMQ . P . F . HNP
... TL . ASRC ADAARAYAWLSEHEMR . P . F . RNP
... DF . ATRC LNAAARAYEWCTSHDAE . P . F . HNP
... EF . ADKC LLSAKYSWTWLEKHPNE . PGF . RNP
... EF . ANQC LDAAIFAWWLEENPTVN RY . TDP
... KY . GEKAKDYEKAADTY LEAAERAMKYLEKNST GFP . YNP
... EF . ALKC RDAAVKAYSMDANAAADTTGF . LNP
... EL . AQKC LAAGELAWSYLEKTPT . IPF . TNP
... NF . AKDC LSRAEQAWSYLEQPN . LNF . SNP
... TY . ADKL LKQAKLSYAAKANPEL . YAPLDQ
... G . AAGP LSAARTAYAAKANPNR IASDAD
... QL . AQLT LEAARTWAAQEHPL YAPGEA
... AF . AARA LTAARTAWAALAHPL LADPND
... DF . AAEC LAAAETAWDAKANPNI YAPAF
... DF . AAEC LAAAETAWDAKANPNI YAPAF
... AF . AQRC LTAARTAWNALANPAI YATAAD
... DF . AQRC LTAARTAWDALANPAI YATAAD
... G . AATC LNAAATRAWDAQANPND IYSGNY
... G . AALC LTAARAWDAQANPND IYSGNY
... AF . ATKC LTAARAWDAVAHPEI YATMEQ
... AF . ATKC LTAARAWDAVAHPEI YATMEQ
... TF . ANQC LVSARAWAAIKNPAI YAPLQS
... AY . SAR LASARAWAAKASPAI YAPFEN
... EF . ANRC LNAAQTAWNAANPVM LAGRTP
... DF . AARC LTAARAWQANAHFAM LAAEFP
... AF . AKRC LAAARAFAAKQNP LVTHTT
... TF . AADC LEKAEIAWQAALKHPDI YAEYTP
... TF . AADC LEKAEIAWQAALKHPDI YAEYTP
... TF . AADC LEKAEIAWQAALKHPDI YAEYTP
... TF . AADC LEKAEIAWQAALKHPDI YAEYTP
... TF . AADC LEKAEIAWQAALKHPDI YAEYTP
... EF . AEKC LFAAVRAYLWSEKNPEV DWPHNT
... EF . AEKC LFAAVRAYLWSEKNPEV DWPHNT
... PD . CAQA KEAALRAYAWAQNPAV Y . DQPKMNAE
... YVE . SYQA TEAAKRAYEWAVNHPQV FY . ROGSMNQ
... PY . ASKC LEAAKKAYAWGQONPSR NYLANP
... TY . ASKC LEAAKKAYAWGQONPSR NYLANP
... TY . AAQC LEAAKKAYAWGLQNP AF . TNP
... TY . ATQC LEAAKKAYAWALQNP AF . YNP
... TY . ATQC LEAAKKAYAWALQNP AF . YNP
... PY . ANAA LDAAARKAWDAEKNPER FY . NNP
... AF . SDKC LKASIAAYDWSKKNKSV IY . NQGVMMNQK
... LLPGL . SDSC LHAARAWQWALQHPHL VY . DQKMMNQ
... HFPGR . AEQY LQAAEKAWAWAKKPKA LY . TQP
... DF . SERA LAAAEFAWQWALEHPNL YY . RQDAMNQE
... AR . ASEM LTAARAWWAGQHPNT AY . TQP
... QPGL . AQRM ASARLAWDAQANP EY . RQP
... QYPGA . SARM LKAARSAWAWAQHPNV IY . RQP
... QYPGA . SARM LKAARSAWAWAQHPNV IY . RQP
... QYPGA . SARM LKAARSAWAWAQHPNV IY . RQP
... TL . AQOM LDAAEAAWAWAKANPSI TY . TQP
... QLPGM . SARM LAAAEASAWNVAWNP TY . KQP
... KL . AATY LEHARTLFDMAWAKSD KGY
... EL . SEQY LEHARTLFTIANKARSE KGY
... AL . AKTY LEHAENCFKIADTRDH KNT
... EGORSAY LEHAENIFKIASTSPSD TV YND
... EY . SKKL VHGAKVYVYQFGRTRGR YS AGTA
... LY . SQKL VKGATTLFKFSRTQRGR YS PGGS
... AY . SQKL VHGARTLFFKSRDQRGR YS VG . N
... AY . SQKL VHGARTLFFKARDQRGR YS AGGS
... AY . SQKL VHGARTLFFKARDQRGR YS AGGS
... AY . SQKL VHGARTLFFKARDQRGR YS AGGS
... AY . SQKL VHGARTLFFKARDQRGR YS AGGS
... AY . SQKL VHGARTLFFKARDQRGR YS AGGS
... AY . SQKL VHGARTLFFKARDQRGR YS AGGS
... AY . SQKL VHGARTLFFKARDQRGR YS AGGS
... AY . SQKL VHGARTLFFKARDQRGR YS AGGS
... GY . ADQL LQHSKQLFDFADKYRGR YD NSIT
... AY . STEL LRHAYQLFDFADKYRGR YD SSIT
... AY . AKEL LTHAYQLFDFADKYRGR YD SSIT
... GY . SNE LNHAHQLFDFADKYRGR YD SSIT
... KY . SSTL LSHSKSLFDFADKNRGS YD G
... NY . STKL LKRSRSLFAFADKYRGS YQ A
... VY . SKKL LGNAVKVFRAFADKYRGS YS DSLG
... VY . SKKL LGNAVKVFRAFADKYRGS YS DSLG
... VY . SKKL LGNAVKVFRAFADKYRGS YS DSLG
... VY . SKKL LGNAVKVFRAFADKYRGS YS DSLG
... SY . SKLL LRTSOKVYQFALQYQGS YS NSLG
... KY . SALL LRTARKVYQFAMQYQGA YS DSLG
... SY . SGLL LDRVAVVYQFANRRHGA YS SSLG
... SY . SNLL LDRVAVVYQFANRRHGA YS SSLG
... AY . SURL LNRVAVVYQFADTHRGA YS SSLK
... AY . SURL LDRTRVYQFANRYRGA YS NSLY
... SY . SSSL LRTAQKVFADKYRGS YS DSLS
... SY . SGK LHTAMKVFADRYRGS YS DSIG
... SY . STEL LHAATKVFADRRHGS YS DSLS
... SY . STKL LHTAMKVFADRYRGS YS NSLN
... SY . STKL LHTAMKVFADRYRGS YS NSLN

Q9SRX3	.CD	.P	.SY	.SNHL	.LQRAITVVF	FADKYRGP	.YS	.AGLA	
Q42875	.CN	.P	.SY	.SKIL	.IKRAITRVFA	FADKYRGS	.YS	.NGLR	
D4LD59	.ED	.E	.D	.D	.LKYAKALLN	YATRVNSV	.D	.ATD	
D4L9U6	.TD	.E	.D	.AY	.AAKS	.LKYANALYD	FARDHEKE	.LS	.DNGD
Q0PRM9	.ED	.P	.AY	.AEKS	.LKYAKALFQ	FAERCPTK	.SV	.N	.ID
A3DJ82	.TD	.P	.QY	.AAKS	.LDYAKALFD	FAEKNPKG	.VV	.QGED	
Q8VV73	.TD	.P	.QY	.AAKS	.LDYAKALFD	FAEKNPKG	.VV	.QGED	
D4LBQ2	.TE	.P	.EY	.AAES	.LQKAIALYD	FAVKTHTE	.TEGLKV	.TSLG	
B8I2K6	.SD	.P	.QY	.AEEC	.LKVAKALYE	FAKKYRG	.G	.KA	
Q50HR0	.SD	.K	.EY	.AEKC	.LTTAKALYE	FAKKYRG	.G	.TG	
B8I7V7	.SD	.P	.AY	.AKKC	.LDTAKALYR	FAVKNRG	.G	.LG	
Q9EYQ4	.SD	.P	.AY	.AKKC	.LDTAKALYR	FAVKNRG	.G	.LG	
Q55365	.AGDF	.AY	.ADEL	.LVNAQSLYR	FADTYRGG	.YS	.DSIP		
A4PCG1	.AGDF	.AY	.ADEL	.LVNAQSLYR	FADTYRGG	.YS	.DSIP		
B8I7V9	.ID	.S	.AY	.ATKC	.LNAAKELY	AMGKANQGV	.G	.G	
Q9EYQ2	.ID	.S	.AY	.ATKC	.LNAAKELY	AMGKANQGV	.G	.G	
Q9RGE6	.VD	.A	.TY	.ANKC	.LTAACKNLY	SLGKNYKGL	.S	.S	
D9SS68	.VD	.A	.TY	.ANKC	.LTAACKNLY	SLGKNYKGL	.S	.S	
B8I0N0	.ID	.S	.TY	.AEKC	.LTYAKDLYD	FGMTYRGN	.S	.S	
E0RQU2	.VD	.P	.EY	.AQCC	.LDAAQSLYE	FGKTYRGL	.S	.S	
Q97KK3	.VD	.A	.EY	.ANKC	.LTAAKDLYD	FGKTYKGL	.S	.S	
A5A7P3	.AD	.S	.SY	.SNEL	.LDHAKTLFD	FAYNYRAK	.YT	.DSIS	
F2Z7L1	.SD	.A	.SY	.ANQL	.LDHAKTIYD	FAYNRRGI	.YS	.ESIP	
I2F181	.SD	.A	.AF	.ANNL	.LAHSRTLYD	FALNRRGI	.YS	.QSIS	
Q9Y0W2	.SD	.S	.SY	.SSQV	.LSVAKELYE	FADQHRDI	.YT	.NAIT	
Q86GS4	.SD	.S	.SY	.SSQV	.LSVAKELYE	FADQHRDI	.YT	.NAIT	
A8CYP6	.AD	.S	.NY	.ANTL	.LRHAKELYN	FADNYRGG	.YS	.DSIS	
Q9NCE2	.VD	.P	.SY	.SNTL	.LTHAKQLYD	FGDNFRGK	.YS	.ESIN	
Q9NCE3	.VD	.P	.TY	.SNTL	.LTHAKQLYD	FADMRHGK	.YS	.DSIT	
Q8IFU3	.TD	.S	.NY	.ANTL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
Q8IFU2	.TD	.S	.NY	.ANTL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
Q8IFU6	.TD	.S	.NY	.ANTL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
Q8IFU5	.TD	.S	.NY	.ANTL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
Q8IFU4	.TD	.S	.NY	.ANTL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
O77044	.VD	.G	.TY	.SNNL	.LTHARQLFD	FANNYRGG	.YS	.DSIT	
O77045	.VD	.G	.TY	.SNNL	.LTHARQLFD	FANNYRGG	.YS	.DSIT	
Q9BLD3	.AD	.S	.TY	.SNNL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
Q9BH22	.AD	.S	.TY	.SNNL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
Q9BLD1	.AD	.S	.TY	.SNNL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
Q9BLD2	.AD	.S	.TY	.SNNL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
A0A1V1FNA0	.AD	.A	.TY	.SNNL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
Q9U901	.AD	.A	.TY	.SNNL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
Q64I76	.AD	.A	.TY	.SNNL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
O76130	.AD	.A	.TY	.SNNL	.LTHAKQLFD	FANNYRGG	.YS	.DSIT	
Q9BMC7	.VD	.S	.SY	.SDNL	.LAHAKQLFD	FADNYRGG	.YS	.DSIT	
S5TE16	.VD	.S	.SY	.SEKL	.LDRAKQLFD	FADKNRGK	.YS	.DSIT	
D2X8D7	.VD	.S	.SY	.SANL	.LDRAKQLFD	FADKHRGK	.YS	.DSIT	
A0SGJ6	.KD	.P	.PY	.SAKL	.LQHAKSLWQ	FAVTHGK	.YS	.ESVS	
A0SGJ9	.KD	.P	.SY	.SAKL	.LQHAKSLWQ	FAVTHGK	.YS	.DSVS	
A0SGJ5	.KD	.P	.SY	.SAKL	.LQHAKSLWQ	FAVTHGK	.YS	.DSVS	
A0ZT16	.VCSD	.T	.TF	.ANNL	.LTAAKSLYE	FTKNNRGI	.YS	.QCVN	
Q86M37	.RD	.A	.KY	.AATL	.LSTSKELYE	FGKKYPGI	.YS	.SSIQ	
Q75UN9	.RD	.A	.KY	.AATL	.LSTSKELYE	FGKKYPGI	.YS	.SSIQ	
M9QOR8	.RD	.A	.KY	.AATL	.LSTSKELYE	FGKKYPGI	.YS	.SSIQ	
P22699	.SN	.P	.TY	.AATC	.LAHAKTLHN	FGYTYRGG	.YS	.DSIT	
P37700	.SD	.P	.TY	.AEKC	.ISHAKNLYD	MDAKKSD	.AG	.YT	
O65987	.ID	.K	.AY	.SEQC	.IQHAKELYN	FADTTKSD	.AG	.YT	
Q02934	.VD	.G	.EY	.SKEC	.LKHAKELFE	FADTTKSD	.DG	.YT	
Q9L3J8	.VD	.G	.EY	.SKEC	.LKHAKELFE	FADTTKSD	.DG	.YT	
B9MKU5	.RN	.S	.QK	.ADTY	.LQHAKMVLFD	FADRTKSD	.AG	.YT	
E4S8G9	.RN	.S	.KK	.ARIY	.LKHAKELYD	FAETKSD	.AG	.YT	
P22534	.RN	.P	.TK	.AATY	.LQHAKDLYE	FAEVTKSD	.SG	.YT	
P96311	.RN	.P	.TK	.AATY	.LQHAKELYE	FAEVTKSD	.AG	.YT	
B9MKU7	.RN	.P	.TK	.AATY	.LQHAKELYE	FAEVTKSD	.AG	.YT	
A3DCY5	.TD	.P	.AY	.AALC	.IRHAKELFD	FAETTMSD	.KG	.YT	
Q70DK3	.TD	.P	.AY	.AALC	.IRHAKELFD	FAETTMSD	.KG	.YT	
A9KT90	.KD	.P	.TY	.SATC	.LRHAKELFN	FADTTKSD	.AG	.YT	
P23659	.RD	.P	.AY	.AATC	.IQHAKELYN	FAEITKSD	.SG	.YT	
D9SRK9	.TD	.P	.SY	.SELC	.LKHAKELFT	FADTTRSD	.AG	.YK	
P26224	.TD	.P	.EY	.AATL	.LRHAKELFT	FADTTRSD	.AG	.YR	
E0RQU1	.T	.D	.VY	.D	.LQKAEQLFAR	ADEDRND	.DN	.YT	
A3DD31	.D	.D	.TY	.D	.LRYAKKYFEL	ADATRS	.ST	.YT	
Q9AJF8	.D	.D	.TY	.D	.LRYAKKYFEL	ADATRS	.ST	.YT	
G8LXR4	.Q	.D	.NY	.D	.LKHAKSLFEL	SDKTRSD	.AD	.YK	
Q9L3J5	.TD	.P	.EY	.AETC	.LTHAKQIF	FGDKYRAK	.KS	.D	
Q0PRN4	.TD	.P	.EY	.AETC	.LTHAKQLFK	FGDTRGK	.NP	.D	
B8I7V6	.TD	.P	.TY	.ADKL	.LEHAKQLYE	FGDKYRGG	.FS	.DVIG	
Q9EYQ5	.TD	.P	.TY	.ADKL	.LEHAKQLYE	FGDKYRGG	.FS	.DVIG	
P26221	.DD	.P	.AY	.AATL	.VQHAKQLYT	FADTYRGG	.YS	.DCVP	
Q47MW0	.DD	.P	.AY	.AATL	.VQHAKQLYT	FADTYRGG	.YS	.DCVP	
G4XKY7	.DD	.P	.AY	.SATL	.VQHAEQLYE	FADTHRGV	.YS	.DCVP	
Q3ZMA8	.SD	.P	.SY	.AATL	.VTHAKQLYS	FADTYRGA	.YS	.DCVK	
P26225	.DD	.P	.AY	.AATL	.VSHAKQLYT	FADTYRGA	.YS	.DCVT	
F4H3U7	.DD	.P	.AY	.AATL	.VSHAKQLYT	FADTYRGA	.YS	.DCVT	
GH9c_CD	.TD	.P	.SY	.ANTL	.LTHARQLYT	FADTYRGG	.YS	.DCIT	
GH9e_CD	.TD	.P	.DY	.ADKL	.LTHAKQLYT	FADTVRGG	.YS	.DCIT	
W8PWF7	.TN	.P	.SY	.ADTL	.VRHARELYT	FADTVRRR	.YH	.ECIT	
Q9Z4I1	.SD	.P	.VY	.SAKL	.LQHAKELYN	FADTYRGG	.YT	.DCIT	
Q5YLG1	.TD	.A	.SY	.AAKL	.LTHAKQLYA	FADRYRGG	.YT	.DCVT	
P28622	.TD	.A	.PY	.AAKL	.LTHAKQLYA	FADQYRGE	.YT	.DCVT	
Q9R9H6	.TD	.A	.PY	.AAKL	.LTHAKQLYA	FADQYRGE	.YT	.DCVT	
A6Y862	.TD	.A	.PY	.AAKL	.LTHAKQLYA	FADQYRGE	.YT	.DCVT	
Q9RAI8	.DA	.VNRDSFVRR	.ASSS	.D	.CAHAKELYD	FADRYRGG	.YS	.DCIT	
Q6SYB5	.TD	.S	.SY	.SEKL	.LAHAKQLYD	FADRYRGG	.YS	.DCIT	

	210	220	230	240	250			
B0FWI3	...GGDCA	YCDHDKENI	DDYTAL	LAATE	LYAATK	...K...QE	YLED	AYDRAE
C9RJA3	...GGDCA	YCDHDKENI	DDYTAL	LAATE	LYAATK	...K...QE	YLED	AYDRAE
Q6LUT2	...QYLDN	KGKNI	DEYCALL	ASVE	LYRSTQ	...E...NN	FLAE	ARMWAD
Q9KUA8	...YLDNG	VENI	DEYCALL	ACC	LYRTTE	...N...DQ	YLAQ	AREWAQ
Q11VF8	...GSPDGS	FYAA	NDNYK	DDY	STMC	AE	LF	WATN
B8I7X6	...SGPDPG	YST	ADDS	QSR	FLAAAT	LYR	VTG	...
A3DD30	...SPPGPG	YNV	YDSD	GR	LWAAAS	LYR	ATG	...
P71140	...SPPGPG	YNV	YDSD	GR	LWAAAS	LYR	ATG	...
Q9AQF4	...SPSGP	YNV	YDSD	DR	LWAAAS	FF	WGIN	...
A3DDN1	...SGFSTG	EYAT	VSDA	DDR	LWAAAE	MW	ETLG	...
B8I7X6	...SGFSTG	EYAT	VSDA	DDR	LWAAAE	MW	ETLG	...
W8PF21	...DMSGSG	YDD	RDDA	DDR	FWAAVE	LW	VVTG	...
D9ZF47	...AGCNTG	GED	YDSD	DER	LWAAAE	LY	VTTG	...
P23658	...DGSNTG	QYDE	AEDIS	NR	FWAAAC	LYE	ATS	...
B8I4R4	...SDVASG	EYGD	SSGK	DEK	AWAAAE	LF	RATG	...
A0A346PYQ5	...PGVNTG	EYGD	VYDR	DER	FWAAVE	LY	SATG	...
C8WSJ6	...DGILTGE	EYGD	AELR	DEL	LWASCA	LLR	MTG	...
Q9AJ50	...DGILTGE	EYGD	AELR	DEL	LWASCA	LLR	MTG	...
F8IJE7	...AGILTGE	EYGD	RELR	DEL	LWASCA	MLR	MTG	...
D7PC10	...DGVATG	EYGD	KKLS	DEH	YWAAAS	LL	QATG	...
B7U9C9	...PDILTGE	EYGD	ACDL	DER	YWAAATE	LY	FSTG	...
H2BNN6	...SFFTTGT	YND	VSAT	DER	YWAAAE	LY	KTTG	...
A9UGW3	...GGIVTGE	EYGD	DRTI	DEY	FWAYAE	MY	KTTG	...
E9NSJ5	...SDVFTG	EYDP	AVNK	DEF	FWAAVE	LY	VATG	...
Q6DTY2	...KGISTG	EYGD	GVDG	DER	YWAAAE	LL	KATG	...
D4LAY7	...SDISTG	EYGD	KSDR	DER	YWAAAE	LY	RATG	...
D4LDI9	...AIGGGG	EYGD	TNVK	DDF	YWAAAE	LY	ATTG	...
Q9Z3X7	...GTGGGG	EYGD	PSVT	DEF	YWAAAE	LF	ATTG	...
P14090	G...ADGGGA	YND	SOVA	DEF	YWAAAE	LY	LTG	...
Q05156	G...TGGGAY	ND	DDVT	DEF	YWAAAE	LY	LTG	...
Q47FF7	G...EGGGP	YND	NNVT	DEF	YWAAAE	LF	LTG	...
Q08166	G...EGGGP	YND	NNVT	DEF	YWAAAE	LF	LTG	...
GH9c_CD	G...NGGGP	YDD	DFVE	DEF	YWAAAE	LY	ITG	...
GH9a_CD	G...DGGGP	YDD	DFVD	DEF	YWAAAE	LY	ITG	...
C5HG55	G...DNGGGG	EYGD	ARVS	DEF	YWAAAE	LY	ITG	...
P10476	G...DNGGGG	EYGD	RFVA	DEF	YWAAAE	LY	ITG	...
B8I7V4	G...GAGGGA	EYGD	NYVL	DDF	YWAAAE	LY	ATTG	...
Q46002	G...GAGGGA	EYGD	NYVL	DDF	YWAAAE	LY	ATTG	...
Q9LAJ2	G...S.FSGT	EYGD	TNIA	DEF	YWAAAE	LY	ETT	...
Q9RGE8	G...GPGGGG	EYGD	DNVT	DEF	YWAAAE	LY	ETT	...
H9TUL5	G...EGGGG	EYGD	GNVD	DEF	YWAAAE	LF	ITT	...
F4YTG7	G...ELGGGA	EYGD	GKVS	DEF	YWAAVE	LY	LTG	...
GH9f_CD	G...DEGGGT	YAD	GTVD	DEF	YWAAAE	LF	VTTG	...
Q6RSN8	GSGGPGGGP	YND	DYVG	DEF	YWAAAE	LY	VTTG	...
A3DCH2	GSGGPGGGP	YND	DYVG	DEF	YWAAAE	LY	VTTG	...
Q59325	GSGGPGGGP	YND	DYVG	DEF	YWAAAE	LY	VTTG	...
A3DCH1	GSGGPGGGP	YND	DYVG	DEF	YWAAAE	LY	VTTG	...
Q69308	GSGGPGGGP	YND	DYVG	DEF	YWAAAE	LY	VTTG	...
F0C2S1	GSGGPGGGP	YND	DYVG	DEF	YWAAAE	LY	VTTG	...
Q59444	G...EGSGG	EYGD	SDLG	DDF	FWARAA	LY	RELK	...
C9RJA2	G...EGSGG	EYGD	SDLG	DDF	FWARAA	LY	RELK	...
E9NSN8	FQPEITG	YADD	FDVT	DEF	YWAAATE	LY	LLTK	...
E9NSR0	YQPAVNTG	EYGD	GRAN	DEK	FWAAATE	MY	RLTN	...
P77864	...SDVSTG	EYEN	DNP	DEK	VLAGE	TE	LFITG	...
D9S4N9	...SDVSTG	EYEN	DNP	DEK	VLAGE	TE	LFITG	...
A7UG67	...SDVATG	YS	GELS	DEK	AFASME	LF	ISTG	...
Q59442	...MDVATG	YS	GELS	DEF	AFASME	LF	ISTG	...
E9NSH8	...MDVATG	YS	GELS	DEF	AFASME	LF	ISTG	...
E9NSM0	...SDIKTG	EYGD	NNFS	DEF	FWAAAE	LL	ITG	...
Q11VL4	YNPDI	NTGAYDD	GNVT	DEF	QWAAI	EL	IATN	...
GH9b_CD_without_signal_peptide_and_first_Met	FHPVITG	YADD	DDLQ	DEW	CWAAATE	LW	LTG	...
Q308B8	...AEVNTG	EYAM	LNETI	DEW	FWAAAE	LL	RASD	...
Q5NJL8	HSPDIVT	EYGD	SNVS	DEF	DWAAAE	LY	ITG	...
Q9APG3	...DDVSTG	EYGD	SEFS	DEF	AWAAAE	LY	ITG	...
Q308B7	...EDVGTG	EYGD	SKLD	DEW	AWAAAE	LF	LTG	...
Q9RBJ4	...DDVRTG	YDD	ATVD	DEF	AWAAAE	LY	VSTR	...
A0A0H2X852	...DDVRTG	YDD	ATVD	DEF	AWAAAE	LY	VSTR	...
H9L4N3	...DDVRTG	YDD	ATVD	DEF	AWAAAE	LY	VSTR	...
Q308B9	...ADIKTG	EYGD	SNLA	DEF	AWAAAE	LY	ITTK	...
D8VN24	...DDIKTG	EYGD	GNLA	DEF	FWAAAE	LY	ITSK	...
Q8RR29	T...AANGFY	NS	WSGF	DEL	ALSAC	W	LYNATG	...
Q402U6	T...MANGY	YSS	FNGF	DEL	GMAAC	W	LYEATG	...
D4LDI8	P...ASDDM	YPS	SHPY	DEL	FWAAAN	MY	KATG	...
D4LFJ4	S...DASGF	YRS	SHPY	DEL	FWAAAN	MY	KATG	...
Q38890	E...SSKF	YNS	SMY	DEF	IWGGAW	MY	YATG	...
G0ZTA3	D...PSKF	YNS	TGY	DEY	VWGGAW	MY	YATG	...
Q04890	E...AETF	YNS	TGY	DEF	IWGGAW	LY	YATG	...
Q6X680	D...PALF	YNS	SSY	DEF	VWGGAW	LY	YATG	...
Q2UZT3	D...PALF	YNS	SSY	DEF	VWGGAW	LY	YATG	...
Q6PW04	D...PALF	YNS	SSY	DEF	VWGGAW	LY	YATG	...
F1BWZ3	D...PALF	YNS	SSY	DEF	VWGGAW	LY	YATG	...
D3JWK8	E...AAIF	YNS	TSY	DEF	IWGGAW	LY	YATG	...
Q6DMM4	E...AAIF	YNS	TSY	DEF	IWGGAW	LY	YATG	...
Q5NAT0	V...ARNY	YGS	FSGY	DEL	LWASAW	LY	QASN	...
Q8LJP6	V...AQXY	YRS	VSGY	DEL	LWAAAW	LY	QASN	...
Q93WY9	V...AQKY	YRS	VSGY	DEL	LWAAAW	LY	KASN	...
Q9ZSP9	V...AQKY	YRS	VSGY	DEL	LWAAAW	LY	KASN	...
P22503	...SCPF	YCS	YSGY	DEL	LWAAAW	LY	KASG	...
Q42871	...SCPF	YCS	YSGY	DEL	LWAAAW	LY	KASG	...
Q04972	S...AACPF	YCS	YSGY	DEL	YWGAAW	LL	RATN	...
Q93WZ1	S...AACPF	YCS	YSGY	DEL	YWGAAW	LL	RATN	...
Q0H8W0	S...AACPF	YCS	YSGY	DEL	YWGAAW	LL	RATN	...
Q41012	S...AACPF	YCS	YSGY	DEL	LWAAAW	LF	RATN	...
Q6DMM3	S...AVCP	YCS	YSGY	DEL	LWAAAW	LF	RATN	...
Q93WZ0	S...AVCP	YCD	FDGY	DEL	LWAAAW	LH	KATR	...
Q42872	S...AVCP	YCD	FNGY	DEL	LWAAAW	LH	KATR	...
Q9ZTL0	N...AVCP	YCD	VNGF	DEL	LWAAAW	LH	KASR	...
Q9CAC1	H...AVCP	YCD	FNGY	DEL	LWAAAW	LH	KASR	...
Q82473	S...VVCPP	YCS	YSGY	DEL	LWGAAS	W	LHRASQ	...
P94114	S...VVCPP	YCS	YSGY	DEL	LWGAAS	W	LHRASQ	...
Q9XLY8	S...AVCP	YCS	YSGY	DEL	LWGAAS	W	LHRASQ	...
Q40763	S...VVCPP	YCS	YSGY	DEL	LWGAAS	W	LHRASQ	...
Q9AVI5	S...VVCPP	YCS	YSGY	DEL	LWGAAS	W	LHRASQ	...

Q9SRX3 P...EVCPPYCS..YSGYQDEL..LWGAAWLYKATN.....N....PTYLNYIKANGQ
Q42875 K...VVCPYCS..VSGYEDDEL..LWGAAWLYHRATK.....N....PTYLNYIQRNGQ
D4LD59 G...PNGFYGS...DDYKDDV..AWAAGWLYLATATG.....D....TTYQNIIMNQNI.
D4L9U6 G...PKQYYS...SKWQDDY..CWASAWMYKITG.....D....HAYLEEIPYNY.
Q0PRM9 G...PKGYYS...SKWQDDY..CWASAWLYLATATG.....D....DHYLDETLKKNF.
A3D382 G...PKGYYS...SKWQDDY..CWAAAALYLATQ.....N....EHYLDLAFKYY.
Q8VV73 G...PKGYYS...SKWQDDY..CWAAAALYLATQ.....N....EHYLDLAFKYY.
D4LBQ2 Y...DGGFYYS...SYDYDEL..AWAAVWLYEACTG.....E....WDYDDIIVHVE
B8I2K6 A...GDGYYS...DYDEDEL..AWAAVWLYOCTG.....N....MDYIKDIDSVD.
Q50HR0 Y...SGGYYS...AYDDDEM..SWAAVWLYNIATG.....N....KQYIDDIVSV.
B8I7V7 D...SGGFYYS...AYDEDEL..SWAAVWLYNIATG.....E....QSYINDITAI.
Q9EYQ4 D...SGGFYYS...AYDEDEL..SWAAVWLYNIATG.....E....QSYINDITAI.
Q55365 E...VRNYYS...WSGYEDDEL..AYGAAWLSRAVN.....SAGGDGSAYLQKALNIYN
A4PCG1 E...VRNYYS...WSGYEDDEL..AYGAAWLSRAVN.....SAGGDGSAYLQKALNIYN
B8I7V9 N...GQSFYQA...TSFGDDL..AWAATWLYTATN.....D....STYITDAEQFIT
Q9EYQ2 N...GQSFYQA...TSFGDDL..AWAATWLYTATN.....D....STYITDAEQFIT
Q9RGE6 H...GQSYYS...TSYDDEL..AWGAVWLYQATN.....D....NSYMTDANSFLS
D9S688 H...GQSYYS...TSYDDEL..AWGAVWLYQATN.....D....NSYMTDANSFLS
B8I0N0 K...GQSYYS...RTYDEL..MWSGIWLYVATN.....D....NKYMDNVEKLMV
E0RQU2 E...SGGFYYS...SGYDEL..TWGAIWLYIATG.....D....ESYMQDVEGFLE
Q97KK3 E...SGGFYYS...TGYLDDL..SWGAVWLYAATN.....D....NSYMTDIDSFLT
A5A7P3 E...PQSFYYS...Y.GYEDDEL..TWAAAALYKATG.....T....QSYLNKATSSYS
F2Z7L1 N...AADFYYS...S.AYEDDEL..CWGALWLYRATG.....E....QDYMKDANFLP
I2F181 N...AAGFYYS...S.AYEDDEL..AWGAAWLYRATG.....E....QYLLDRAYEFGT
Q9Y0W2 D...AASFYYS...WSGYEDDEL..AWAALWLYRATG.....D....NSYLDRAKGVHS
Q86GS4 D...AASFYYS...WSGYEDDEL..AWAALWLYRATG.....D....NSYLDRAKGVHS
A8CYP6 D...AAAFYYS...Y.SYEDDEL..VWGAIWLYRATN.....D....QNYLNKATQYYN
Q9NCE2 D...AQQFYYS...N.EFEDDEL..VWGALWLYKATM.....D....ESFLTAAQQYYD
Q9NCE3 D...AAQFYYS...Y.GYEDDEL..VWGAVWLYKATN.....D....NSYLTAAEQYYT
Q8IFU3 Q...ASNFYYS...S.DYKDEL..VWAAVWLYRATN.....D....QTYLTTAEKLYS
Q8IFU2 Q...ASNFYYS...S.DYKDEL..VWAAVWLYRATN.....D....QTYLTTAEKLYS
Q8IFU6 Q...ASNFYYS...S.DYRDEL..VWAAAALYRATN.....D....QTYLNTAESLND
Q8IFU5 Q...ASNFYYS...S.DYRDEL..VWAAAALYRATN.....D....QTYLNTAESLND
Q8IFU4 Q...ASNFYYS...S.DYRDEL..VWAAAALYRATN.....D....QTYLNTAESLND
O77044 D...ARNFYYS...A.DYRDEL..VWAAAALYRATN.....D....NTYLTAAESLYD
O77045 D...ARNFYYS...A.DYRDEL..VWAAAALYRATN.....D....NSYLTAAESLYN
Q9BLD3 D...AKNFYYS...G.DYKDEL..VWAAAALYRATN.....D....NTYLTAAESLYN
Q9BH22 D...AKNFYYS...G.DYKDEL..VWAAAALYRATN.....D....NTYLTAAESLYN
Q9BLD1 D...AKNFYYS...G.DYKDEL..VWAAAALYRATN.....D....NTYLTAAESLYN
Q9BLD2 D...AKNFYYS...G.DYKDEL..VWAAAALYRATN.....D....NTYLTAAESLYN
A0A1V1FNA0 D...AKNFYYS...G.DYKDEL..VWAAAALYRATN.....D....NTYLTAAESLYN
Q9U901 D...AKNFYYS...G.DYKDEL..VWAAAALYRATN.....D....NTYLTAAESLYN
Q64176 D...AKNFYYS...G.DYKDEL..VWAAAALYRATN.....D....NTYLTAAESLYN
O76130 D...AQNFYYS...G.DYKDEL..VWAAAALYRATN.....D....NTYLTAAESLYN
Q9BMC7 Q...ASNFYYS...G.DYKDEL..VWAAATWLYRATN.....D....NTYLTAAESLYN
S5TE16 D...ARNFYYS...G.DYKDEL..VWAAATWLYRATN.....D....DAYLTAAESLYN
D2X8D7 D...ARNFYYS...G.DYKDEL..VWAAATWLYRATN.....D....NTYLTAAESLYN
A0SGJ6 A...AASYYS...V.NVTDEL..CWGSLWLYKATK.....E....PKYLEEALKHYYD
A0SGJ9 A...AAGYYS...A.NVTDEL..CWGSLWLYEATK.....E....PKYLEEALKHYYD
A0SGJ5 A...AAGYYS...A.NVTDEL..CWGSLWLYKATK.....E....PKYLEEALKHYYD
A0ZT16 A...AAAFYYS...S.GERDEV..ATAAAWLYMYKATN.....D....NGYLTDAQSLYP
Q86M37 D...AGQFYYS...S.GYKDEM..CEGAMWLYKATG.....D....KSYLADAKGYHE
Q75UN9 D...AGQFYYS...S.GYKDEM..CEGAMWLYKATG.....D....KSYLADAKGYHE
M9QOR8 D...AGQFYYS...S.GYKDEM..CEGAMWLYKATG.....D....KSYLADAKGYHE
P22699 N...AQAFYYS...WSGYKDDL..VWGSIWLYKATQ.....D....SDYLTAAVADYA
P37700 A...ASGYYS...SSFYDDL..SWAAVWLYLATN.....D....STYLDKAAESYVP
O65987 A...ANTYYS...WSGYDEL..SWAAAALYMATN.....D....ASYLEKAAESYVP
Q02934 A...ANGFYYS...WSGFYDEL..SWAAVWLYLATN.....D....SSYLDKAAESYSD
Q9L3J8 A...ANGFYYS...WSGFYDEL..SWAAVWLYLATN.....D....SSYLDKAAESYSD
B9MKU5 A...ATGFYYS...GGFIDDL..GWAAVWLYLATN.....D....KSYLDKAAEALMA
E4S8G9 A...ANGYYS...WSGFYDEL..SWAAVWLYLATG.....D....KYYLDAKKYVS
P22534 A...ANGYYS...WSGFYDEL..SWAAVWLYLATN.....D....STYLTAAESYVQ
P96311 A...ANGYYS...WSGFYDEL..SWAAVWLYLATN.....D....STYLTAAESYVQ
B9MKU7 A...ANGYYS...WSGFYDEL..SWAAVWLYLATN.....D....STYLTAAESYVQ
A3DCY3 A...ALNFYYS...HSGWYDEL..SWAGAWLYIADG.....D....ETYLEKAAEKYVD
Q70DK5 A...ALNFYYS...HSGWYDEL..SWAGAWLYIADG.....D....ETYLEKAAEKYVD
A9KT90 A...ASGFYYS...YSGFYDEL..SWAATWLYIYLAGS.....E....ATYLDKAAESYVA
P23659 A...ASGFYYS...HSGFYDEL..SWAGVWLYLATG.....D....ETYLEKAAEQYVA
D9SRK9 A...AQGCYYS...WSGFYDEL..TWAAATWLYNIATG.....D....SAYLDKAAESYVP
P26224 A...AEGYYS...HSGFYDEL..TWASIWLYLATG.....D....QSYLDKAAESYEP
E0RQU1 A...ASGYYS...WSGPIDEL..MWAALWLYIATG.....D....STYLTAAESYVP
A3DD31 A...ANGFYYS...HSGFWDEL..LWASTWLYLATG.....D....RNYLDKAAESYIP
Q9AJF8 A...ANGFYYS...HSGFWDEL..LWASTWLYLATG.....D....RNYLDKAAESYIP
G8LXR4 A...AENFYYS...WSGWDEL..MWAALWLYLATN.....D....VSYLNKAAESLVS
Q9L3J5SGCFYTP..SGGYLDDL..AWGAVWLYIKTG.....D....STYLEKAAKSFLLP
Q0PRN4LKTLYPS...GGYLDL..AWGAIWLYIKTQ.....D....ATYLEKAAKSIPL
B8I7V6 KVDPQGAAYYS...HSGYKDEL..VWGSIWLYKAMEAKSSGSG...SDYLVKAAKEYYN
Q9EYQ5 KVDPQGAAYYS...HSGYKDEL..VWGSIWLYKAMEAKSSGSG...SDYLVKAAKEYYN
P26221 A...GAFYYS...WSGYQDEL..VWGAYWLYKATG.....D....DSYLAKEAHEYD
Q47M0 A...GAFYYS...WSGYQDEL..VWGAYWLYKATG.....D....DSYLAKEAHEYD
G4XKY7 V...GSFYYS...WSGYQDEL..VWGAYWLYKATG.....D....PSYLDKAAHEYD
Q3ZMA8 D...AQAYYS...WSGYQDEL..VWGAYWLYKATG.....D....ATYLAKEAHEYD
P26225 A...ASAYYS...WSGYQDEL..VWGAYWLYKATG.....D....ATYLAKEAHEYD
F4H3U7 A...ASAYYS...WSGYQDEL..VWGAYWLYKATG.....D....ATYLAKEAHEYD
GH9c_CD D...AQGFYYS...WSGYNDEL..VWGAIWLYRATG.....E....SAYLDKAAETYYA
GH9e_CD D...AANFYYS...WSGYNDEL..VWGAIWLYRATQ.....D....SSYLAKEAETYYA
W8PWF7 D...ASGYYS...FSGYNDEL..VWGAIWLYRATG.....E....ATYLOKAAETYYD
Q9Z4I1 D...AAAFYYS...WTGYEDDEL..AWGAAWLYLATN.....D....NAYLSKAAALSAD
Q5YLG1 N...AQPFYYS...WSGYVDEL..IWGGIWLYLATN.....E....ETYLENKAAKVAE
P28622 N...AQPFYYS...WSGYVDEL..IWGGIWLYLATN.....E....ETYLENKAAKVAE
Q9R9H6 N...AQPFYYS...WSGYVDEL..IWGGIWLYLATN.....E....ETYLENKAAKVAE
A6Y862 N...AQPFYYS...WSGYVDEL..IWGGIWLYLATN.....E....ETYLENKAAKVAE
Q9RAI8 D...AHEYYS...WSGYKDEL..TWGAVWLYLATG.....D....QKYLKAAALASVS
Q6SYB5 D...AQQYYS...WSGYKDEL..TWGAVWLYLATG.....E....QQYLDKAAALASVS

	260	270	280	290
B0FWI3	HLSSRVSKD	. . . . . GYFWSDDAKTRPFW	HASDAGLPL	VALARYSEVVGAIDE
C9RJA3	HLSSRVSKD	. . . . . GYFWSDDAKTRPFW	HASDAGLPL	VALARYSEVVGAIDE
Q6LUT2	KLMARQMSDH	. . . . . NF . AHYWAANDDGSRPYF	HAAEAGLPA	IALMQYLQIE
Q9KUA8	RLAKRQCSDE	. . . . . QI . AHYWSATSNGERPYP	HASDAGLPL	IACEYLNIE
Q11VF8	ST	APGOGADIYGKNYGF	YSNNGDIAI	YNQALLGNTY
B8I6V7	K	GKN SYENVS	WGSWNFAF	FSYMKAN
A3DD30	S	FAQKFESPTAYAHT	WDMWLTAF	LSYLKAEN
P71140	S	FAQKFESPTAYAHT	WDMWLTAF	LSYLKAEN
Q9AQF4	Q	FSKKIEADFD	WNVANLGM	FYLLSER
A3DDN1	T	FTKKIDVDFD	WGNVNLGM	FYLLSER
B8I7X6	T	GLPAYAPVS	WVNPALGY	FYVTLGQ
W8PF21	T	TNENPTHMG	WVDSGLAG	LSCFLGAKKKEAKET
D9ZF47	RL	EEF DKNAQKKG	YQGNVFTCLG	WAEVAGLGS
P23658	. . . . .	IEGFGLG	QNVSGFAA	IAYMFS
B8I4R4	. . . . .	EDFSKTALN	WQNVGGYSV	ISYLFTEK
A0A346PYQ5	. . . . .	LDLPWELG	WADVLYGV	MDYLRTPR
C8WSJ6	. . . . .	LDLPWELG	WADVLYGV	MDYLRTPR
Q9AJS0	. . . . .	LDLPWELG	WADVLYGV	MEYLRA
F8IJE7	T	GGFSLTELG	WADVGGYGT	IAYLRADR
D7PC10	. . . . .	KDFPKCELG	WADMGGYGT	IRYLLADK
B7U9C9	. . . . .	LPKPGFG	WVEMGSYAH	VAITNPL
H2BNN6	. . . . .	DEVPGFEG	WKEVGYGF	YAYLTATY
A9UGW3	. . . . .	AEMELGLG	WEMALYGV	HSYLRTETS
E9NSJ5	. . . . .	LKFENGYG	WASVGHYGN	KAYLTAKA
Q6DTY2	. . . . .	VVCTGMD	WATVGDYGN	IALLTSDS
D4LAY7	CFKLTTSLEG	. . . . . GENTGSF	SGSFNGTAGLGT	LTLYLNRDVL
D4LDI9	Y	GTSAERGD	WGTGGAGR	HVALVPTDL
Q9Z3X7	H	ADVFTADGFG	WGSVAALGR	LDLATV
P14090	H	ADIFGPTGFD	WGHTAAAGR	LDLALVPSRL
Q05156	H	TDDEEVFRD	GAFD	WGTAALAR
Q47FF7	H	TDDEEVFRD	GAFD	WGTAALAR
Q08166	H	TDIFRPEGFD	WRWTAPLGR	LQLATIPNGL
GH9c_CD	H	TDIFRPEGFD	WRWTAPLGR	LQLATIPNGL
GH9a_CD	H	ITRTDFG	WADTELAGL	ISLAMVPTAH
C5HG55	. . . . .	LERTDFG	WPTELLGV	MSLAVV
P10476	. . . . .	TGGENTGITGAFD	WGCTAGMGT	ITLALVPTKL
B8I7V4	. . . . .	TGGENTGITGAFD	WGCTAGMGT	ITLALVPTKL
Q46002	. . . . .	VGGEANGVSGCFDS	GDVTLGLT	ISLAIG
Q9LAJ2	DKFLKIPTKI	. . . . . TGGEDKGLSGAFD	WGNVAGLGT	ISLAIG
Q9RGE8	DKFLKMP TTL	. . . . . PSNVSSMS	WGTTAALGT	ISLAVVPNTL
H9TUL5	. . . . .	YFNVPFGTN	. . . . .	ISLAVVQDA
F4YTG7	. . . . .	NLSGQPMF	WADTAALGT	ISLAVVQDA
GH9f_CD	. . . . .	GHRSSMN	WSTTDALGM	ISMLARSHV
Q6RSN8	. . . . .	GENGGANGEDNGLWGCF	TGTTQGLGT	ITLALVENGL
A3DCH2	. . . . .	GENGGANGEDNGLWGCF	TGTTQGLGT	ITLALVENGL
Q59325	. . . . .	GENGGANGEDNGLWGCF	TGTTQGLGT	ITLALVENGL
A3DCH1	. . . . .	GENGGANGEDNGLWGCF	TGTTQGLGT	ITLALVENGL
Q69308	. . . . .	GENGGANGEDNGLWGCF	TGTTQGLGT	ITLALVENGL
P0C2S1	. . . . .	GENGGANGEDNGLWGCF	TGTTQGLGT	ITLALVENGL
Q59444	LERLESQLPV	. . . . . DMDTYLPTYGLQ	WRSTQNLAW	FALATMDCKW
C9RJ28	LERLESQLPV	. . . . . DMDTYLPTYGLQ	WRSTQNLAW	FALATMDCKW
E9NSN8	SL	PAFTPSV	WGNVAELAS	LDRLMHLSPE
E9NSR0	. . . . .	NRFTCTP	WGSVAGLVF	SWINAGES
P77864	. . . . .	SEYVSY	WGDVMGLATY	EKATHQAQF
D9S4N9	. . . . .	SEYVSY	WGDVMGLATY	EKATHQAQF
A7UG67	. . . . .	MSIVPA	WPEMYGLAVY	AAATHATEV
Q59442	. . . . .	TSIVPA	WPEMYGLAVY	AAATHATEV
E9NSH8	. . . . .	VNIVPA	WPEMYGLAVY	GAATHATEV
E9NSM0	. . . . .	QFETPRN	WNACNSLAL	MSMIWHLNEL
Q11VL4	LR	TEFELPN	WAKVNTLGLYS	LIQNRDNL
GH9b_CD_without_signal_peptide_and_first_Met	. . . . .	LPPTVPT	WSDVRTLAYF	SFRLQRHH
Q308B8	. . . . .	KPRVPE	WSAVESLGLYA	LARQNNAP
Q5NJL8	. . . . .	HGITIPAW	WPQVRPLAW	VSLAHHDRDL
Q9APG3	. . . . .	GNQVPS	WQSLSGLAW	MSLATHADSL
Q308B7	. . . . .	TPQVFN	WADVGLAW	ISLSRHPARL
Q9RBJ4	. . . . .	HASVPG	WSNVGGGLAW	MSLAHRDQL
A0A0H2X852	. . . . .	HASVPG	WSNVGGGLAW	MSLAHRDQL
H9L4N3	. . . . .	HASVPG	WSNVGGGLAW	MSLAHRDQL
Q308B9	. . . . .	YNTVPS	WGDVRLAW	VSLAHHREQL
D8VN24	. . . . .	VATVPS	WGDVRLAW	VSLAHHREQL
Q8RR29	HPGYE	FQGNSGPIAYN	WPLGDDVHLGAEY	WLAKFTG
Q402U6	KFGTE	DPG . TKDQAYS	WPLCDDVHLAAN	LKLAFTG
D4LDI8	PNLGK	ED . QSTEMKY	WTGMCDDVQOQGGT	LLYALNTG
D4LFJ4	PNLGK	EL . GTSSELKYS	WSQCDDVQOQGGT	LLYAQN
Q38890	AK	HAGAFWGGP	PYYGVFS	WLNKLAGAQ
G0ZTA3	AK	HAGAFRGGQ	DYGVLS	WLNKLAGAQ
O04890	AK	HAGAFWGGP	PDYGVLS	WLNKLAGAQ
Q6X680	AK	HAGAFWGGP	PDYGVLS	WLNKLAGAQ
Q2UZT3	AK	HAGAFWGGP	PDYGVLS	WLNKLAGAQ
Q6PW04	AK	HAGAFWGGP	PDYGVLS	WLNKLAGAQ
F1BWZ3	AK	HAGAFWGGP	PDYGVLS	WLNKLAGAQ
D3JWK8	AK	HAGAFWGGP	PDYGVLS	WLNKLAGAQ
Q6DMM4	AK	HAGAFWGGP	PDYGVLS	WLNKLAGAQ
Q5NAT0	AL	G GTGWSINQ	FWDVKYYPGVQ	ILAKFPLM
Q8LJP6	SM	G GTGWAMTE	FQTDVKYTGVT	LVAKFPLM
Q93WY9	AL	G GTGWSMTE	FQTDVKYAGVQ	TLAKFPLM
Q9ZSP9	AL	G GTGWSMTE	FQTDVKYAGVQ	TLAKFPLM
P22503	. . . . .	G W . SQTVEFS	WDDNKFVGAQ	TLTEEFY
Q42871	. . . . .	G W . SQVASEFS	WDDKFAQ	TLAKKEYL
O04972	. . . . .	L A . NDVPDLFS	WLNKYAGAH	VLSRRSV
Q93WZ1	. . . . .	L A . NDVPDLFS	WLNKYAGAH	VLMARRSV
Q0H8W0	. . . . .	L A . NDVPDLFS	WLNKYAGAH	VLMARRSV
Q41012	. . . . .	L A . DDQPDIFS	WLNKYAGAH	VLSKRAL
Q6DMM3	. . . . .	L A . DDQPDIFS	WLNKYAGAH	VLSKRAL
Q93WZ0	VL	R A . GDTINEF	GWDNKHAGIN	VLSKEVL
Q42872	IL	R A . GDTINEF	GWDNKHAGIN	VLSKEVL
Q9ZTL0	IL	R A . GDTINEF	GWDNKHAGIN	VLSKEVL
Q9CAC1	IL	K A . GDTINEF	GWDNKHAGIN	VLSKEVL
O82473	TM	G A . NDDYSFS	WDDKRPGTK	ILSKDFL
P94114	IL	G A . DDDGFS	FSWDDKRPGTK	VLSKNFL
Q9XIY8	TM	G S . DDDYSFS	WDDKRPGTK	ILSKDFL
Q40763	TM	G S . DDDYSFS	WDDKRPGTK	ILSKDFL
Q9AVI5	TM	G S . DDDYSFS	WDDKRPGTK	ILSKDFL

Q9SRX3	IL.....G.....A.DEFDNMFSD	DNKHVGAR	ILLSKEFL.....I.	
Q42875	TL.....G.....A.AETDNTFG	DNKHVGAR	ILLSKSFL.....V.	
D4LD59	.....PQYIGWVHC	WNNVSLGAH	IVKAHITG.....DW
D4L9U6	.....DYAAPCYVVC	WNDMWGGVQ	CVLGEIVS.....E.
Q0PRM9	.....DYAPSCWTHC	WNDVWAGTAC	ICIAEIND.....LI
A3DJ82	.....DYYAPPGWIHC	WNDVWSGTAC	ICIAEIND.....LY
Q8VV73	.....DYYAPPGWIHC	WNDVWSGTAC	ICIAEIND.....LY
D4LBQ2	TVTGDMDGAHPYTGYLKRIADT.	GNCWQNIWVHC	WDTVWGGVF	AKLAPITN.....I.
B8I2K6AQGNYTGymkRIIPETYN	TNTWYNSWTHC	WDVAVGGTF	LKLNELLP.....EN
Q50HR0KDGKYGymkKIIVNE.	QNHWQNIWVHS	WDVWGGVF	AKLAPITN.....T.
B8I7V7SDGKYTGymkKIIST.	QDNWQNIWVHS	WDVWGGVF	AKLAPITN.....D.
Q9EYQ4SDGKYTGymkKIIST.	QDNWQNIWVHS	WDVWGGVF	AKLAPITN.....D.
Q55365	SD.....IGGLSRGWTHN	WDDASYGVA	VILAQDTG.....N.	
A4PCG1	SD.....IGGLSRGWTHN	WDDASYGVA	VILAQDTG.....N.	
B8I7V9	LG.....NTMNEKMQDKWTMC	WDDMYVPAAL	RLAQITG.....K.	
Q9EYQ2	LG.....NTMNEKMQDKWTMC	WDDMYVPAAL	RLAQITG.....K.	
Q9RGE6	QI.....NADGDKVYTSYWTHC	WDDNVWTVIY	KMAEVTG.....K.	
D9SS68	QI.....NADGDKVYTSYWTHC	WDDNVWTVIY	KMAEVTG.....K.	
B8I0N0	EK.....GITGNSFNDNWTQC	WDYVLTGVF	TKLALIST.....N.	
E0RQU2	EK.....GINEQNGYNSWTHC	WDDVWGGVF	VKLEISD.....R.	
Q7GKK3	AK.....GIGGNSYSNHWTHC	WDDVWGGVF	VKLAQITN.....N.	
A5A7P3	.....SGTPWALS	WDDKNAGAQM	LLYQLTG.....S.
F2Z7L1	.....QGRPWAFS	WDDSKAAGSL	VLLTSFG.....N.
I2FI81	T.....TNTAWAYD	WNEKIVGYQ	LLLTTSAG.....Q.	
Q9Y0W2	EFN.....LLGTPSQFG	WDDKKAGVQ	ALLVLLDG.....S.	
Q86GS4	EFN.....LLGTPSQFG	WDDKKAGVQ	ALLVLLDG.....S.	
A8CYP6	QYS.....IQYKNSPLS	WDDKSTGAS	ALLAKITG.....G.	
Q9NCE2	DFG.....IAEYNPWF	WDDQKTSQ	LLLAQITQ.....E.	
Q9NCE3	QFG.....LADYDGYFS	WDDQKISGVE	VLLAEITK.....D.	
Q8IFU3	DLG.....LQSWNGGFT	WDTKISGVE	VLLAKITG.....K.	
Q8IFU2	DLG.....LQSWNGGFT	WDTKISGVE	VLLAKITG.....K.	
Q8IFU6	DYG.....LQYWNVHFT	WDSKALGAT	ALLAKITG.....K.	
Q8IFU5	DYG.....LQYWNVHFT	WDSKALGAT	ALLAKITG.....K.	
Q8IFU4	DYG.....LQYWNVHFT	WDSKALGAT	ALLAKITG.....K.	
O77044	EFG.....LQNWGGGLN	WDDSKVSGVQ	VLLAKLTN.....K.	
O77045	EFG.....LQNWGGGLN	WDDSKVSGVQ	VLLAKLTN.....K.	
Q9BLD3	EFG.....LGSWNGAFN	WDDNKISGVQ	VLLAKLTS.....K.	
Q9BH22	EFG.....LGSWNGAFN	WDDNKISGVQ	VLLAKLTS.....K.	
Q9BLD1	EFG.....LGSWNGAFN	WDDNKISGVQ	VLLAKLTS.....K.	
Q9BLD2	EFG.....LGSWNGAFN	WDDNKISGVQ	VLLAKLTS.....K.	
A0A1V1FNA0	EFG.....LGNFNGAFN	WDDNKVSGVQ	VLLAKLTS.....K.	
Q9U901	EFG.....LGNFNGAFN	WDDNKVSGVQ	VLLAKLTS.....K.	
Q64I76	EFG.....LGNWNGAFN	WDDNKISGVQ	VLLAKLTS.....K.	
O76130	EFG.....LGNWNGAFN	WDDNKISGVQ	VLLAKLTS.....K.	
Q9BMC7	EFG.....LGNWNGAFN	WDDNKVSGVQ	VLLAKLTS.....K.	
S5TE16	EFG.....LGNWNGALN	WDDNKVSGVQ	VLLARLTK.....K.	
D2X8D7	EFG.....LGNWNGALN	WDDNKVSGVQ	VLLAKLTS.....K.	
A0SGJ6	.....ASPDWGMS	WDDVFIGNQ	VLLYELTK.....E.
A0SGJ9	.....ASPDWGMS	WDDVFIGNQ	VLLYELTK.....E.
A0SGJ5	.....ASPDWGMS	WDDVFIGNQ	VLLYELTK.....E.
A0ZT16	.....AGTPWGFAN	WDDAQSGAA	LLLYEATQ.....D.
Q86M37	.....NAWAWALG	WDDKKIACQ	LLLYEATK.....D.
Q75UN9	.....NAWAWALG	WDDKKIACQ	LLLYEATK.....D.
M9OQR8	.....NAWAWALG	WDDKKIACQ	LLLYEATK.....D.
P22699	SGGV.....GGMAQGNSHD	WDDNKAPGCC	LLLSKLPV.....TT.	
P37700	NWGKE.....QQTDIIAYKWGC	WDDVHYGAE	LLLAKLTV.....K.	
O65987	FWKVE.....QQTTIIAYRWAHC	WDDVHGAQ	LLLARLTG.....K.	
Q02934	KWGYE.....PQTNIPKYKWAQC	WDDVYGTY	LLLARIKN.....DN.	
Q9L3J8	KWGYE.....PQTNIPKYKWAQC	WDDVYGTY	LLLARIKN.....DN.	
B9MKU5	EYA.....GGTNTWTQC	WDDVRYGAI	LLLAKITN.....K.	
E4S8G9	NWPKI.....AGSNTIDYRWAHC	WDDVHYGAA	LLLAKITD.....E.	
P22534	NWPKI.....SGSNTIDYKWAHC	WDDVHNGAA	LLLAKITD.....K.	
P96311	NWPKI.....SGSNTIDYKWAHC	WDDVHNGAA	LLLAKITD.....K.	
B9MKU7	NWPKI.....SGSNTIDYKWAHC	WDDVHNGAA	LLLAKITD.....K.	
A3DCY5	KWP IE.....SQTTYIAYSWGHC	WDDVHYGAA	LLLAKITN.....K.	
Q70DK3	KWP IE.....SQTTYIAYSWGHC	WDDVHYGAA	LLLAKITN.....K.	
A9KT90	KWGTE.....PQSTLSYKWAQN	WDDVHYGAA	LLLARITN.....K.	
P23659	YWGTE.....PQSTLSYKWAHC	WDDVHYGAC	LLLAKITG.....K.	
D9SRK9	NWGVE.....LGTSTPKYTWAHN	WDDNCFGSY	LLLARLTN.....K.	
P26224	HWERE.....RGTTLISYSWAHC	WDDNKLYGSL	LLLAKITG.....K.	
E0RQU1	LLNRQ.....GQTEIDIEYQWGH	WDDVHYGGL	LLLAKITG.....K.	
A3DD31	KLNRQ.....NQTTDIEYQWAHC	WDDCHYGAM	ILLARATG.....K.	
Q9AJF8	KLNRQ.....NQTTDIEYQWAHC	WDDCHYGAM	ILLARATG.....K.	
G8LXR4	IQNRE.....NQSDLIKFTWAHC	WDDVLSGAM	LLLAKITD.....K.	
Q9L3J5	VT.....SLGGGHTHC	WDDVSYGAA	LKIAQLTH.....D.	
Q0PRN4	VT.....VLGGQHTHC	WDDVSYGAA	LKIAQAGR.....D.	
B8I7V6	GIGKE.....ANQQVHKYKWAHC	WDDQSFQCY	ILMSQIDP.....EN.	
Q9EYQ5	GIGKE.....ANQQVHKYKWAHC	WDDQSFQCY	ILMSQIDP.....EN.	
P26221	FLSTE.....QQTDLRSYRWTIA	WDDKSYGTY	VLLAKETG.....K.	
Q47MW0	FLSTE.....QQTDLRSYRWTIA	WDDKSYGTY	VLLAKETG.....K.	
G4XKY7	FLSTE.....QQTDVRSYRWTIA	WDDKSYGAY	VLLARETG.....E.	
Q3ZMA8	KLGTE.....NQSTTKSFKWTIA	WDDNKQFATY	ALLAMETG.....K.	
P26225	KLGTE.....NQSTTRSYPKWTIA	WDDNKQFATY	ALLAMETG.....K.	
F4H3U7	KLGTE.....NQSTTRSYPKWTIA	WDDNKQFATY	ALLAMETG.....K.	
GH9c_CD	NLSNQ.....QQTNVKSYKWTIA	WDDKSYGTY	VLLAKLTV.....N.	
GH9e_CD	NLSNQ.....QQTNVKSYKWTIA	WDDKSYGTY	VLLAKLTV.....N.	
W8PWF7	NLSNE.....PQTTTKSYRWTIA	WDDKSYGAY	VLLAALTV.....K.	
Q9Z4I1	RWSTS.....GGSANWPYTTWQ	WDDSKHYGAQ	ILLARITSNLNMPEA.....E.	
Q5YLG1	EWP.....QDWDYTFMTS	WDDNTFFASQ	ILLARITK.....E.	
P28622	EWP.....KDWDYTFMTS	WDDNTFFLSQ	ILLARITK.....E.	
Q9R9H6	EWP.....QDWDYTFMTS	WDDNTFFASQ	ILLARITK.....E.	
A6Y862	EWP.....KDWDYTFMTS	WDDNTFFASQ	ILLARITK.....E.	
Q9RAI8	DWG.....DPANWPYRWTLS	WDDVSYGAA	LLLARLTN.....E.	
Q6SYB5	DWG.....DPANWPYRWTLS	WDDVYGAQ	LLLARLTN.....D.	

	300	310	320	330	340	350
B0FWI3	DAGIKVHGRPF	FPYWGCV	TMIGGG	CVNESIDN	VNRNAIR	SHFDWL
C9RJA3	DAGIKVHGRPF	FPYWGCV	TMIGGG	CVNESIDN	VNRNAIR	SHFDWL
Q6LUT2					THAQRAEQ	CCQSVLL
Q9KUA8					TDTANYAQL	QRVVEQAC
Q11VF8						AKDVLNSI
B8I6V7						RVNGDAEK
A3DD30						WIDTEFGI
P71140						WIDTEFGI
Q9AQF4						WIDTEFGI
A3DDN1						GKNPALVQ
B8I7X6						GKNPALYNT
W8PF21						KGDPAIRAR
D9ZF47						QRFOVCQQ
P23658						ENALCSLAR
B8I4R4						GTDQKKVDE
A0A346PYQ5						GLDNEVYNY
C8WSJ6						AVSDDVRNK
Q9AJS0						AVSDDVRNK
F8IJE7						AVSEDRVRS
D7PC10						VTQAVWEHL
B7U9C9						EKDAALYAEL
H2BNN6						EEDTELYQK
A9UGW3						EKDSELYDA
E9NSJ5						EKDAEFTELL
Q6DTY2						ADQNVAGNIR
D4LAY7						SKSTSAYTKA
D4LDI9						A...ADAKT
Q9Z3X7						A...ADVARRA
P14090						G...LDA...V
Q05156						G...RDQ...V
Q47PF7						D...RDR...V
Q08166						D...RDR...V
GH9d_CD						D...REA...V
GH9a_CD						D...RDA...V
C5HG55						S...SLRASARQ
P10476						N...SLRIAARN
B8I7V4						A...ADVATAK
Q46002						A...ADVATAK
Q9LAJ2						V...ASKTTAR
Q9RGE8						A...TSKATVR
H9TUL5						E...NDIEVLR
F4YTG7						...ARALVKY
GH9f_CD						A...GLRKTLR
Q6RSN8						A...TDIQKARN
A3DCH2						A...TDIQKARN
Q59325						A...TDIQKARN
A3DCH1						S...ADIQKARN
Q69308						A...TDIQKARN
P0C2S1						A...TDIQKARN
Q59444						E...RARMAFKY
C9RJ28						E...RARMAFKY
E9NSN8						P...MAESLKG
E9NSR0						E...MQSEMQL
P77864						G...DANEAKQ
D9S4N9						G...DANEAKQ
A7UG67						A...DAETAKQ
Q59442						A...DAEKAKS
E9NSH8						A...DAEKAKS
E9NSM0						D...FVDTQLI
Q11VL4						E...EFAFPTLE
GH9b_CD_without_signal_peptide_and_first_Met						...ALPEDFY
Q308B8						...KMQQGAS
Q5NJL8						P...AANVGHI
Q9APG3						A...AADTALI
Q308B7						D...DAARVRV
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Q402U6						KEYYEILE
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D4LFJ4						STYISRVQ
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G0ZTA3						LSPGYPY
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Q9ZSP9						GKAG.HN
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Q0H8W0						GND...KRFD
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Q6DMM3						NND...KNFE
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Q42872						GKA...PDLK
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P94114						KNN...EEFQ
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SM.....
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...KEEYG...GSNMV...LNRAM...ILVAH
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...KMEYN...GSNMN...VATHAM...HLLISD
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D4L9U6	.W....ASVKEALDTYMSGGIGEISPGGYFW.....LNT	W	GSAARYN	T	AA	QL	IA	MVYD
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 I Q S Y I T G Y G D N P L E N P H H R F W A Y Q A D N
 V Q S Y V T G Y G S N P V E N P H N V F W A Y Q Y D N
 V Q S Y V T G Y G S N P L E N P H H R F W A Y Q A D N
 G F S F V S Y G A V S M Q H P H H R F W G N R P Q S
 N F S F V S E Y G T Q T L A H P H H R F W A N Q P A N
 G Q S Y V T G Y G D R P L Q N P H H R F W A H Q A N A
 D Q S Y V T G Y G E R P L Q N P H D R F W T P Q T S K
 D Q S Y V T G Y G E R P L Q N P H D R F W T P Q T S K
 D Q S Y V T G Y G E R P L Q N P H D R F W T P Q T S K
 D Q S Y V T G Y G E R P L Q N P H D R F W T P Q T S K
 D Q S Y V T G Y G E R P L Q N P H D R F W T P Q T S K
 D V S F V T G S A W S S P K F P H H R I S H S D
 D V S F V T G S A W S S P K F P H H R I S H S D
 G Y C Y V T G F G S Q P S S H P H H R L S Y S H
 G Y C Y V T G F G Q K S P M H P H H R I S S S D
 D M S F V T G Y G S K S P K M P H H R P S T S D
 D M S F V T G Y G S K S P K M P H H R P S T S D
 D M S F L T G F G T K S P K L P H H R P S T A D
 D M S F L T G F G T K S P M L P H H R P S T A D
 D M S F L T G F G T K S P M L P H H R P S T A D
 D Y C F V T G F G T K F P K H L H D R R S F S D
 G Y C Y V S Y G S K Q V M N P H H R P S E A D
 G Y C F V T G F G A R S P M H P H H R P S I A D
 G Y S F V T G F G S K S A L Y P H H R I S H Y D
 G Y S F V T G I G S R T P M D P H H R P S A A H
 E Y S F V T G F G A R P P M H I H H R P S V A D
 G V S F V T G Y G L R T P M H V H H R P S Q A D
 G L S F V T G V G Q R T P M H I H H R P S E A D
 G L S F V T G V G Q R T P M H I H H R P S E A D
 D T S F V T G F G H K S P L H P H H R P S E A D
 D M S F V T G Y G D K S T L H P H H R P S E A D
 R S Y Q V G Y D E T S P R D V H H R T A H G C W R N K F S D I
 H S Y Q V G F G K D Y P V N P H H R T A H G S W L G E L T K L
 K F S Y V I G M G D T Y P K A W H H R T S S G V W D D Q W T M L G E
 H Q C Y V V G H C A N S P K N P H H R T A H C S W K N A L E T
 K M S Y V V G F G T K Y P R H V H H R G A S I P K N K V K Y N C K G G W K W . R D S
 K M S Y L V G Y G S H Y P K H V H H R G A S I P K N K I K Y S C K G G W K W . R D S
 K M S Y V V G F G N H Y P K H V H H R G A S I P K N K V K Y N C K G G W K Y . R D S
 K M S Y V V G F G N H Y P K H V H H R G A S I P K N K I K Y N C K G G W K W . R D T
 K M S Y V V G F G N H Y P K H V H H R G A S I P K N K I K Y N C K G G W K W . R D T
 K M S Y V V G F G N H Y P K H V H H R G A S I P K N K I K Y N C K G G W K W . R D T
 K M S Y I V G F G N H Y P K H L H H R G A S I P K N K I R Y N C K G G W K W . R D T
 K M S Y I V G F G N H Y P K H L H H R G A S I P K N K I R Y N C K G G W K W . R D T
 G T S Y M V G Y G A V Y P R Q A H H R G S S I A S I R A S P S F V S C R E G Y A S W Y G R
 G T S Y M V G Y G N N P P R Q V H H R G S S I V S I K V D S K F I A C R R G Y A A W Y T R
 A T S Y M V G Y G N N Y P R Q V H H R G S S I V S V K K D P S F V S C R G G Y A T W F S R
 A T S Y M V G Y G N N Y P R Q V H H R A S S I V S F K N P S F V S C R G G Y A T W F S R
 K M S Y M V G F G S K Y P Q L H H R G S S I P S I K V H P A K V G C N A G L S D Y Y N S
 K M S Y M V G F G N K Y P T K L H H R A S S L P S I Y N H P T R V G C N D G Y S S W Y N S
 K M S Y M V G Y G S N Y P R R I H H R G S S L P S L A M H P Q S F G C E A G F Q P F Y Y T
 K M S Y M V G Y G T N Y P R R V H H R G S S L P S M A M H P Q S F G C D G G F Q P Y Y Y T
 K M S Y M V G Y G T N Y P R R V H H R G S S L P S M A M H P Q S F G C D G G F Q P Y Y Y T
 R M S Y M V G Y G P Y F P K R I H H R G S S L P S L S V H P Q T I G C D G G F N P P F H S
 R M S Y M V G F G P N F P K R I H H R G S S L P S L A S H P Q A I G C D S G F E P F F H S
 R M S Y M V G Y G P R Y P L R I H H R G S S L P S V A A H P A R I G C K G G S N Y . F L S
 R M S Y M V G Y G P H Y P Q R I H H R G S S V P S V A T H S A R I G C K E G S R Y . F F S
 R M S Y M V G Y G P R Y P Q R I H H R G S S L P S V Q A H P A R I G C K A G S R Y . F L S
 G L S Y M V G Y G Q K F P R R I H H R G S S V P S V A H P S H I G C K E G S R Y . F L S
 K I S Y M V G F G D K Y P L R V H H R G S S L P S V H A H P H I G C N D G F Q S . L N S
 K I S Y M V G F G K K Y P L H I H H R G S S L P S V H E H P E R I S C N N G F Q Y . L N S
 K M S Y M V G F G N K Y P Q H V H H R G S S V P S I H A H P N R I S C N D G F Q Y . L Y S
 R M S Y M V G F G N R Y P Q H V H H R G S S V P S I H D T R I G I S C N D G F Q F . L Y S
 R M S Y M V G F G N R Y P Q H V H H R G S S V P S I H A H P N R I S C N D G F Q F . L Y S

Q9SRX3
Q42875
D4LD59
D4L9U6
Q0PRM9
A3DJ82
Q8VV73
D4LBQ2
B8I2K6
Q50HR0
B8I7V7
Q9EYQ4
Q55365
A4PCG1
B8I7V9
Q9EYQ2
Q9RGE6
D9SS68
B8I0N0
E0RQU2
Q97KK3
A5A7P3
F2Z7L1
I2FI81
Q9Y0W2
Q86GS4
A8CYP6
Q9NCE2
Q9NCE3
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Q8IFU2
Q8IFU6
Q8IFU5
Q8IFU4
Q77044
Q77045
Q9BLD3
Q9BH22
Q9BLD1
Q9BLD2
A0A1V1FNAO
Q9U901
Q64I76
Q76130
Q9BMC7
S5TE16
D2X8D7
A0SGJ6
A0SGJ9
A0SGJ5
A0ZT16
Q86M37
Q75UN9
M9QQR8
P22699
P37700
O65987
Q02934
Q9L3J8
B9MKU5
E4S8G9
P22534
P96311
B9MKU7
A3DCY5
Q70DK3
A9KT90
P23659
D9SRK9
P26224
E0RQU1
A3DD31
Q9AJF8
G8LXR4
Q9L3J5
Q0PRN4
B8I7V6
Q9EYQ5
P26221
Q47MW0
G4XKY7
Q3ZMA8
P26225
F4H3U7
GH9c_CD
GH9e_CD
W8PWF7
Q9Z4I1
Q5YLG1
P28622
Q9R9H6
A6Y862
Q9RAI8
Q6SYB5

..... KMSYMVGYL... KYPRRIHHRGSSSLPSVAVHPTRIOCHDGFSL.FTS
..... KM SYMVGYA... RYPQR I HHR GSSSLPSVANHPAKIQCRDGF SV.MNS
..... NKCFVVGAD... NSAKYP HHR AASGLTNWD..... EFNN.SGG
PAPYSADLHGPRCFIVGND... VAAAY P HHR ASSGLSK..... C... ED
..... NRCYVVGYSD... NAVKY P HHR ASSGYAT..... A... EG
..... NRCYVVGYSS... NSV KY P HHR AASGLK D..... A... ND
..... NRCYVVGYSS... NSV KY P HHR AASGLK D..... A... ND
..... NR PYIVGYSP... TAA SH P HHR AAHGSKT..... LN.MDD
..... GY SYIVGYG YEQGLPSARH P HHR AAHGSKT..... NS.MND
..... NRCYIVGYAE... NSAKH P HHR AAHGSKT..... NS.MEV
..... KR SYEVGFSE... ISAKH P HHR AAHGSKT..... LS.MND
..... KR SYEVGFSE... ISAKH P HHR AAHGSKT..... LS.MND
..... NASYMVGYGN... DFPQQ P HHR AASGVGW.D..... G... FRN
..... NASYMVGYGN... DFPQQ P HHR AASGVGW.D..... G... FRN
..... NMSYIIIGYS... NWCIH P HHR AANGYTY.A..... N... GDN
..... NMSYIIIGYS... NWCIH P HHR AANGYTY.A..... N... GDN
..... SSSYVVGFGN... NYPKF P HHR GASGRLE.P..... G... EMK
..... SSSYVVGFGN... NYPKF P HHR GASGRLE.P..... G... EMK
..... NMSYVVGFGD... NYPKY P HHR AASGVLE.G..... PPAD.EKK
..... GL SYEVGFGE... NYPKF P HHR AASGRLE.A..... P PAN.ESK
..... NS SYEVGFGN... NYPKN P HHR AASGRME.G..... APGY.EKK
..... R SFVVGFGE... NPPQR P HHR SSSCPDQPQ..... SC SWNE.YNS
..... R SFVVGFGT... NPPLR P HHR AASCPDMPA..... SCGWDO.ASD
..... R SYVVGFGN... NPPQQ P HHR SSSCPDQPA..... ECDWDE.FNQ
..... YQ SFVVGFGV... NPPTR P HHR SSSCPDRPA..... DCSN.G.LTN
..... YQ SFVVGFGV... NPPTR P HHR SSSCPDRPA..... DCSN.G.LTN
..... R SFVVGFGN... NPPSHEQHR AASCPDAPA..... AC DWNT.YNG
..... K SFVVGFV... NPPSHESH R SSSCPDAPA..... PC DWVT.YGS
..... K SYVVGFQ... NPPTHESH R SSSCPDAPA..... AC DWNT.YNG
..... R SFVVGYGN... NPPTH P HHR SSSCPDAPA..... TCDWNN.YNS
..... R SFVVGYGN... NPPTH P HHR SSSCPDAPA..... TCDWNN.YNS
..... R SFVVGFGN... NPPTH P HHR SSSCPDAPA..... TCDWNN.YNS
..... R SFVVGFGN... NPPTH P HHR SSSCPDAPA..... TCDWNN.YNS
..... R SFVVGFGN... NPPTH P HHR SSSCPDAPA..... TCDWNN.YNS
..... R SFVVGFGN... NPPTH P HHR SSSCPDAPA..... TCDWNN.YNS
..... R SFVCFGFS... NPPTR P HHR SSSCPPAPA..... TCDWNT.FNS
..... R SFVCFGFS... NPPTR P HHR SSSCPPAPA..... TCDWNT.FNS
..... R SYVVGFGT... NPPVR P HHR SSSCPDAPA..... AC DWNT.YNS
..... R SYVVGFGT... NPPVR P HHR SSSCPDAPA..... AC DWNT.YNS
..... R SYVVGFGT... NPPVR P HHR SSSCPDAPA..... AC DWNT.YNS
..... R SYVVGFGT... NPPVR P HHR SSSCPDAPA..... AC DWNT.YNS
..... R SYVI GFGT... NPPV R P HHR SSSCPDAPA..... VCDWNT.YNS
..... R SYVI GFGT... NPPV R P HHR SSSCPDAPA..... VCDWNT.YNS
..... R SYVI GFGT... NPPV R P HHR SSSCPDAPA..... VCDWNT.YNS
..... R SYVI GFGD... NPPTH P HHR SSSCPDAPA..... VCDWNT.FNS
..... R SYVVGFGD... NPPV R P HHR SSSCPDAPA..... VCDWNT.FNS
..... R SYVVGFGD... NPPV R P HHR SSSCPDAPA..... VCDWNT.FNS
..... R SFVVGFGK... NPPVS P HHR SSSCPNLPV..... RCNMNY.LHL
..... R SFVVGFGK... NPPVS P HHR SSSCPNLPV..... RCNMNY.LHL
..... H I SYEIGFS... KYPQH P HHR GSSCPTTTT..... QCS... IGD
..... G I SYQIGFT... KYPRN P HHR SASCPDIPA..... PCSETN.LHT
..... G I SYQIGFT... KYPRN P HHR SASCPDIPA..... PCSETN.LHT
..... G I SYQIGFT... KYPRN P HHR SASCPDIPA..... PCSETN.LHT
..... QQ SFVVGMP... NYPIN P HHR AAHGSTTND..... I... NN
..... R SFVVGYV... NPPQH P HHR TAHGSWTDQ..... M... TS
..... R SFVVGFGE... NAPKK P HHR TAHSSWDQ..... Q... VN
..... R SFVVGFGE... NPPKR P HHR TAHGSWADS..... Q... ME
..... R SFVVGFGE... NPPKR P HHR TAHGSWADS..... Q... ME
..... R SFVLFGQ... NYPQH P HHR NAHSSWANS..... M... RI
..... R SFVVGFGK... NPPKR P HHR TAHGSWANS..... Q... SE
..... R SFVVGFGT... NPPKR P HHR TAHSSWADS..... Q... SI
..... R SFVVGFGT... NPPKR P HHR TAHSSWADS..... Q... SI
..... R SFVVGFGT... NPPKR P HHR TAHSSWADS..... Q... SI
..... R SYVVGFV... NPPQH P HHR TAHSSWADS..... Q... KV
..... R SYVVGFV... NPPQH P HHR TAHSSWADS..... Q... KV
..... R SYVVGFV... NPPQH P HHR TAHSSWADS..... Q... KV
..... R SFVVGYGV... NPPTR P HHR TAHSSWADS..... Q... TE
..... R SYVVGFV... NPPKR P HHR TAHSSWADS..... M... SV
..... R SFVVGFGE... NPSPTH P HHR TAHSTW MGY..... L... T.CNI
..... R SFVVGFGE... NPPRN P HHR TAHSSWSAL..... M... TE
..... NG SYVVGFGE... NAPQH P HHR TSHGSWADS..... Q... SV
..... NR SYVVGFGN... NPPQR P HHR TAHGTWLDK..... R... DI
..... NR SYVVGFGN... NPPQR P HHR TAHGTWLDK..... R... DI
..... R SFVVGFGE... KSPQR P HHR TAHGSWTDQ..... M... DN
..... KG SYVVGFGE... NSPKH P HHR TAHGSWVSM..... L... EV
..... GG SYEVGFV... DAP EH P HHR TAHGSWTSM..... L... NV
..... KS SYMVGFQ... NYPQH P HHR TAHSSWGQQ..... M... DT
..... KS SYMVGFQ... NYPQH P HHR TAHSSWGQQ..... M... DT
..... NS SYVVGFGN... NPPRN P HHR TAHGSWTDS..... I... AS
..... NS SYVVGFGN... NPPRN P HHR TAHGSWTDS..... I... AS
..... NS SYVVGFGD... NPPRN P HHR TAHGSWTDS..... I... AS
..... KS SYVVGFGT... NPPTM P HHR TAHGSWLD..... I... TT
..... SS SYVVGFGA... NPPTA P HHR TAHGSWLD..... I... TT
..... SS SYVVGFGA... NPPTA P HHR TAHGSWLD..... I... TT
..... NR SYVVGFGN... NPPRN P HHR TAHGSWTDS..... I... SN
..... KS SYVVGFGN... NPPRN P HHR TAHGSWSNN..... I... NE
..... RC SYVVGFGA... CFP P HHR TAHGSWSNN..... I... NE
..... QS SYVVGYGQ... NSPKH P HHR TAHSSWMNN..... E... DI
..... NR SYVVGFQ... NSPKH P HHR TAHGSWSNQ..... L... TN
..... NR SYVVGFK... NPPMH P HHR TAHGSWSNQ..... L... TT
..... NR SYVVGFK... NPPMH P HHR TAHGSWSNQ..... L... TT
..... NR SYVVGFK... NPPMH P HHR TAHGSWSNQ..... L... TT
..... QR SFIVGYGT... NPPKH P HHR TAHGSWADH..... M... NV
..... QR SFVVGYGK... NPPKH P HHR TAHGSWANQ..... M... NV

	460	470	480	490
B0FWI3	... .DAT	LEGGIANGT	ISG..K...	NQDGS
C9RJA3	... .DAT	LEGGIANGT	ISG..K...	NQDGS
Q6LUT2	... .N	AKGGV	CNGITS	..G...F
Q9KUA8	... .N	AKGGV	CNGITS	..G...F
Q11VF8	... .N	AKGGV	CNGITS	..G...F
B8I6V7	A1PAKN	QOFLM	VGGTRN	..Y...Q
A3DD30	..GKQGI	PKGYM	PGGNA	..Y...E
P71140	..GKQGI	PKGYM	PGGNA	..Y...E
Q9A9F4	..GKAGV	PNYLA	GGIINA	..S...E
A3DDN1	..GIWEP	WPGYLV	GGGWP	..G...P
B8I7X6	..SLKDP	WPGYLV	GGGWP	..G...P
W8PF21	..GVMVP	GLLV	GGND	..H...P
D9ZF47	..GIDET	IPIEF	VVGGNS	..A...P
P23658	..DIEEP	WPGLV	SGGNS	..G...L
B8I4R4	..LALNP	VPGLM	VGGDS	..A...L
A0A346PYQ5	..GIEEP	VPGML	SGGNS	..N...L
C8WSJ6	..DVDHP	VPGMV	VGGNR	..H...L
Q9AJS0	..DVDHP	VPGMV	VGGNR	..H...L
F8IJE7	..DVDHP	VPGMV	VGGNR	..H...L
D7PC10	..AVEAP	VPGML	AGGNS	..N...L
B709C9	..GVEAP	VPGML	AGGNS	..Y...L
H2BNN6	..ETTVP	GMLV	GGNA	..E...I
A9UGW3	..KSPMP	GMLV	GGPEP	..L...L
E9NSJ5	..GHAVP	GMVV	GGNG	..E...P
Q6DTY2	..KAAIP	GMLA	GGND	..N...L
D4LAY7	..GKAMP	GMLV	GGVNO	..N...L
D4LDI9	..SFPYAP	SVM	SGGANS	..G...I
Q9Z3X7	..SLPTAP	PSLA	GGNS	..E...L
P14090	..SLPSP	PSLA	GGNSQA	..A...T
Q05156	..TLPNP	PSLA	GGNS	..S...I
Q47FF7	..RPLNP	PKCTL	LAGGNS	..D...T
Q08166	..RPLNP	PKCTL	LAGGNS	..D...T
GH9c_CD	..ALPHP	VGTLA	GGNS	..S...I
GH9a_CD	..ALPNP	VGTLA	GGNS	..S...I
C5HG55	..NYPAPP	GALSG	GGNA	..G...L
P10476	..NYPAPP	GALSG	GGNA	..G...L
B8I7V4	..TFPKP	PCLS	GGNS	..G...L
Q46002	..TFPKP	PCLS	GGNS	..G...L
Q9LAJ2	..TFPKP	PCLS	GGNS	..G...L
Q9RGE8	..TFPKP	PCLS	GGNS	..G...L
H9TUL5	..SFPPPP	GALAG	GGNA	..Q...P
F4YTG7	..GFPPPP	GTL	SGGNG	..N...P
GH9f_CD	..KYPKAP	GVV	SGGNS	..T...I
Q6RSN8	..RFPAPP	GHS	GGNS	..R...F
A3DCH2	..RFPAPP	GHS	GGNS	..R...F
Q59325	..RFPAPP	GHS	GGNS	..R...F
A3DCH1	..KFPAPP	GHI	AGGNS	..R...F
Q69308	..KFPAPP	GHI	AGGNS	..R...F
P0C2S1	..KFPAPP	GHI	AGGNS	..R...F
Q59444	..GVDEP	VPLV	VGGINE	..D...R
C9RJ28	..GVDEP	VPLV	VGGINE	..D...R
E9NSN8	..PKGTHP	CFLV	GGNR	..M...R
E9NSR0	..GIEKFP	GMLV	GGNP	..M...Q
P77864	..NIEEP	IPLM	VGGQP	..G...G
D9S4N9	..NIEEP	IPLM	VGGQP	..G...G
A7UG67	..KITDP	VPGM	VGGQP	..G...G
Q59442	..KITEP	IPLM	VGGQP	..G...G
E9NSH8	..KITAP	IPLM	VGGQP	..G...G
E9NSM0	..DIKEP	LPGL	CGGANP	..N...Q
Q11VL4	..GIVEP	VPGML	AGGNS	..G...Q
GH9b_CD_without_signal_peptide_and_first_Met	..DVPEP	VPLV	VGGNP	..G...M
Q308B8	..GVAAP	VPLV	VGGQP	..G...W
Q5NJL8	..SHDAP	VPLV	VGGHS	..G...Q
Q9APG3	..DVAAP	VPLV	VGGHS	..G...Q
Q308B7	..GIVEP	VPLV	VGGNP	..G...Q
Q9RBJ4	..GIDAP	VPLV	VGGQP	..G...Q
A0A0H2X852	..GIDAP	VPLV	VGGQP	..G...Q
H9L4N3	..GIDAP	VPLV	VGGQP	..G...Q
Q308B9	..GIAEP	IPLV	VGGQP	..G...Q
D8VN24	..GIVEP	IPLV	VGGQP	..G...Q
Q8RR29	PEHNRHV	LVAL	VGGSS	..S...D
Q402U6	PKTNRHL	LVAL	VGGAS	..A...D
D4LDI8	EKEYAHV	LYCAL	VGGGQ	..S...D
D4LFJ4	PETNRHV	LYCAL	VGGDN	..S...D
Q38890	KKPNPNT	IEGAM	VAGDK	..R...D
G0ZTA3	PRPNPNT	LVGAM	VAGDK	..R...D
O04890	SKANPNT	LVGAM	VAGDK	..H...D
Q6X680	SKPNPNT	LVGAM	VAGDK	..H...D
Q2UZT3	SKPNPNT	LVGAM	VAGDK	..H...D
Q6PW04	SKPNPNT	LVGAM	VAGDK	..H...D
F1BWZ3	SKPNPNT	LVGAM	VAGDK	..H...D
D3JWK8	SKPNPNT	LVGAM	VAGDG	..H...D
Q6DMM4	SKPNPNT	LVGAM	VAGDR	..H...D
Q5NAT0	RCGNPNL	LDGAV	VGGDE	..H...D
Q8LJP6	KASDPNV	LTGAV	VGGDA	..Y...D
Q93WY9	KASDPNL	LACAV	VGGDA	..Y...D
Q9ZSP9	KASDPNL	LTGAV	VGGDA	..Y...D
P22503	ANPNPNT	HVCAI	VGGDS	..N...D
Q42871	NNPNPNT	HVCAI	VGGNS	..G...D
O04972	ANPNPNI	LVCAI	VGGNQ	..N...D
Q93WZ1	ANANPNI	LVCAI	VGGNQ	..N...D
Q0H8W0	ANANPNI	LVCAI	VGGNQ	..N...D
Q41012	MSPNPNI	LVCAI	VGGNQ	..N...D
Q6DMM3	ANPNPNI	LTGAV	VGGNQ	..N...D
Q93WZ0	PNPNPNR	LIGAV	VGGNI	..T...D
Q42872	PNPNPNR	LIGAV	VGGNL	..T...D
Q9ZTL0	PNPNPNK	LVCAV	VGGNS	..S...D
Q9CAC1	PNPNPNL	LVCAV	VGGNV	..T...D
O82473	GSPNPNV	LIGAV	VGGDS	..R...D
P94114	GSPNPNV	LIGAV	VGGDS	..K...D
Q9XIY8	SSPNPNV	LVCAI	VGGDN	..R...D
Q40763	SSPNPNV	LVCAI	VGGDN	..R...D
Q9AVI5	SSPNPNV	LVCAI	VGGDN	..R...D

Q9SRX3 QSPNPNDLVGAVVGGP DQ N DOFPDERSDYGRS
Q42875 QSPNPNVLVGAVVGGP DE H DRFPDERSDYEQS
D4LD59 VCPNGHVLI GALVGGP TD Q G GSYVD SVKDYQAN
D4L9U6 TKPQKHV LV GALVGGP DN K DLHNDVTKDYIYN
Q0PRM9 TSPQKYV LV GALVGGP DA S DOHKDVTSDYIYN
A3DJ82 SSPHKYV LV GALVGGP DA S DOHVDRTNDYIYN
Q8VV73 SSPHKYV LV GALVGGP DA S DOHVDRTNDYIYN
D4LBQ2 PQTQTHV LV GALVGGP DA S DWHRDITKDYIYN
B8I2K6 PEEHRRH LV GALVGGP DA S DYHIDSTTEYAYN
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