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	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Nve_28948	MKRVL	ECEDDGEEL	---	RKRRR	GLI	EKKRR	DRI	NRCLV	ELRRV	PTAL	EKEGSS	KLEKAEIL	HLTVE	HLKWLRS	---	
Hro_98385	MRLRL	HDVYDDDDAL	---	RKRRR	GLI	EKKRR	DRI	NOCLMEL	KRLV	PAAF	EKGST	KLKAEIL	KMEVD	HLKMFQA	---	
pfu_12059	MKRSL	SDS	EG-EDCY	---	RKRRR	GLI	EKKRR	DRI	NNSLS	ELRRV	PSAFE	EKGSS	AKLEKAEIL	QMEVD	HLKIL HQ	
Dre_HeyL	MKRPH	DYSS	PDSDT	---	RKRRR	GLI	EKKRR	DRI	NHSL	SELRRV	PSAFE	EKGSS	KLEKAEIL	QMEVD	HLKLL HA	
Dre_Hey1	MKRNH	DFSS	DS EL	---	RKRRR	GLI	EKKRR	DRI	NNSLS	ELRRV	PSAFE	EKGSS	AKLEKAEIL	QMEVD	HLKMLHA	
Hsa_Hey1	MKRRA	HEYSS	DS EL	---	RKRRR	GLI	EKKRR	DRI	NNSLS	ELRRV	PSAFE	EKGSS	AKLEKAEIL	QMEVD	HLKMLHT	
Hsa_Hey2	MKRCP	CEE	TTSES DM	---	RKRRR	GLI	EKKRR	DRI	NNSLS	ELRRV	PTAFE	EKGSS	AKLEKAEIL	QMEVD	HLKMLQA	
Hsa_HeyL	MKRCP	KPS	GS DGES	---	RKRRR	GLI	EKKRR	DRI	NNSLS	ELRRV	PTAFE	EKGSS	KLKAEV	QMEVD	HLKMLHA	
Dre_gridlock	MKRCP	CE	SDS	DS DM	---	RKRRR	GLI	EKKRR	DRI	NNSLS	ELRRV	PTAFE	EKGSS	AKLEKAEIL	QMEVD	HLKMLQA
Tca_01593	VKRPL	SES	DDCDDV	---	RKRRR	GLI	EKKRR	DRI	NMSLS	ELKRLV	PSAFE	EKGSS	AKLEKAEIL	QMEVD	HLKMLHA	
Dme_Hey	LKRTL	SES	DC- DDLY	---	RKRRR	GLI	EKKRR	DRI	NSS	LTEL	KRLV	PSAFE	EKGSS	AKLEKAEIL	QLTVE	HLKSLQS
Phu_454530	I	KRMH	SES	DDCDDV	---	RKRRR	GLI	EKKRR	DRI	NSSLS	ELRRV	PTAFE	EKGSS	AKLEKAEIL	QMEVD	HLKMLHA
Pdu_Hey	MKRSL	SDS	DS DGEY	---	RKRRR	GLI	EKKRR	DRI	NNSLS	ELRRV	PTAFE	EKGSS	AKLEKAEIL	QMEVD	HLKMLHS	
Lgi_171867	MKRSL	SDS	DDDDV	---	RKRRR	GLI	EKKRR	DRI	NSS	LTEL	RRV	PSAFE	EKGSS	AKLEKAEIL	QMEVD	HLKMLHQ
Spu_09465	---	MSE	ES- DELF	---	RKRRR	GLI	EKKRR	DRI	NNSLS	TELRRV	PAAF	EKGSS	AKLEKAEIL	QMEVD	HLKYL HA	
Sko_hey	MKRTF	SETES- EDI	F	---	RKRRR	GLI	EKKRR	DRI	NNSLS	ELRRV	PAAF	EKGSS	AKLEKAEIL	QMEVD	HLKMLHA	
Tad_21000090	MKCDG	NDSSS	---	---	RKRRR	GLI	EKKRR	DRI	NRCL	HEL	KRLV	PTAFE	EKGSS	AKLEKAEIL	QMEVD	HLKYLKL
Aqu_Hey	MKRHL	SDS	ETEMN	---	RKRRR	GLI	EKKRR	DRI	NNSLS	ELRRV	PAAF	EKGSS	AKLEKAEIL	QMEVD	HLKYLKL	
Dpu_57492	---	KRAL	SES	DCEQDLY	---	RKRRR	GLI	EKKRR	DRI	NHSL	SELRRV	PSAFE	EKGSS	AKLEKAEIL	QLTVD	HLKMLHA
Sme_mk4004178	---	---	---	---	RKRRR	GLI	EKKRR	DRI	NNSLS	LAEL	KELV	PNAI	AKQNTT	KLKAEIL	KLAVD	HLKELKS



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pfu_1362	---	KKPKT	PRDP	---	M5HRII	EKKRR	DRMNNCL	AELSRLI	PSNYLK	QGGQRI	EKTEII	EMASKHI	RHLQNL	TN	---	KFYMG	FKECQ	DEMLRYLI	EVEGRDI	KEGLCT	GVI	SHLDQTS	K	---	YKFKHNI	TKRFSQ	---	VPLFVL	NP	DGTHYI	PI	SI	HPSHLGN	---	TYHPI	SI	PVNFG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Cte_196737	---	RKNRT	PRDP	---	M5HRII	EKKRR	DRMNNCL	ADLSHLI	PATY	LK	QGGQRI	EKTEII	EMGI	KHI	HTLQS	QVK	---	NFKLGF	QECR	DEAMFLV	ERQEL	NAADPL	CRNL	MMHL	QEQLN	---	YKFKNDI	KLRFSD	---	VPGFAL	HPAGAYYI	PWTV	PSVSLMPFI	---	I	CHPI	SI	PVNFG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Pdu_stich	---	MKRMP	SDRDP	---	M5HRII	EKKRR	DRMNNCL	ADLSQLI	PPAYL	K	QGGQRI	EKTEII	EMACKYI	QOLK	QLR	---	KFYLF	GTEC	DEGRFLV	EKKNNY	PSDNI	CVELI	DHLKDS	MK	---	YKFKNTI	KLRFSD	---	VPGFAL	HPSGTYI	PIVI	AVAHLL	PYL	---	I	CHPI	SI	PI	SFG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Lgi_231922	---	KTS	QKQCRDP	---	M5HRII	EKKRR	DRMNNCL	SDLSKLI	PHGYI	K	QGGQRI	EKTEIV	EMAI	KHI	TS	LQMZVK	---	SFYHGF	QMCSEII	KFLTET	EGVSHNNP	FNLRL	CEHLN	MRKS	---	YKFKHII	RHRYSRD	---	LPGFWI	HPHTHT	HYVPI	SVH	---	---	---	---	---																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Dme_stich	---	RNKTS	RQCDP	---	L5HRII	EKKRR	DRMNS	CLADLSRLI	PPYQY	QKQGR	GR	EKTEII	EMAI	RHLKHL	QSECC	---	YRS	GDMCKE	AAKFLY	DVHMDF	CHRL	LRL	QELHI	DEM	K	---	YKYKNI	KERFVHE	---	VPI	FAL	HGQGNYY	PLNVD	YNALV	PFL	---	VVHPI	NI	NVNF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Dpu_101890	---	KKT	KSARDP	---	Q5HRII	EKKRR	DRMNNCL	ADLSRLI	PSAYM	KKGR	GR	EKTEII	EMTI	KHMKHL	QVHAC	---	QYRS	GFLECI	TETVQFI	ADHMG	FYPGDD	GSRLV	AHLN	HHY	---	YKFKTNI	HORETAD	---	VPI	FAL	HPKSAFY	YPMI	ELSLI	RTL	F	---	LL	HPVTI	SVNFG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Isc_04855	---	GGKK	PARDP	---	M5HRII	EKKRR	DRMNNCL	ADLSRLI	PAVYL	KKGR	GR	VEKTEII	EMAI	KHLRHL	QAHS	---	QYRL	GFQEC	LS	ETARFLV	DL	DGSC	CTADDT	CFRLV	AHL	QKH	F	---	YKFKNDI	KDRFHKD	---	VAAAF	AL	HPRG	SGFYI	PVTL	DPTLV	GPAL	---	AL	HPVSI	SVQFG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Tca_12119	---	---	---	---	M5HRII	EKKRR	DRMNNCL	ADLSRLI	PTEYL	KKGR	GR	EKTEII	EMAI	KHMYL	QKEHG	---	HYRMGY	QECMSE	AMF	FMLV	VEQGY	AGDS	LCVEMI	NHLR	KHCD	---	YKYKNNI	KMRFSD	---	VPI	FVL	HAKGS	YYVPLTI	DYKTL	PFL	---	VL	HPVTI	NVNF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Phu_134640	---	---	---	---	M5HRII	EKKRR	DRMNNCL	ADLSRLI	PPEYL	KKGR	GR	EKTEII	EMAI	KHI	GHLQNMIA	---	HYKMG	YL	ECMSE	AMF	FLV	VEQGY	AGDS	LCVEMI	NHLR	KHCD	---	YKFKNNI	KORFSKE	---	I	PI	FAL	HSKGS	FYVPLTL	DHATL	APFL	---	SYSKPTF	DPNFG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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Bf103107	---	EEQRD	---	LHRIV	EKRRR	DRI	NECI	AQLKDL	PEHL	KLTT	LGHLEK	AVVL	ELTL	KHVKAL	NNL	E	---	DFLAGY	RECLGEAI	RYMSQSP	---	VDGVS	CEKI	ESH	LRH	HCQRL	---	MFPAM	PGV	---				
Dre_DEC1	---	EDSKDTYKL	---	PHRLI	EKKRR	DRI	NECI	AQLKDL	PEHL	KLTT	LGHLEK	AVVL	ELTL	KHVKAL	NNL	E	---	MFRS	GFHL	CAKEVL	QFLANQE	---	TMRDL	TT	AHI	EHL	QKVAS	EL	---	AMPVL	YPGL	---		
Hsa_DEC1	---	EDSKETYKL	---	PHRLI	EKKRR	DRI	NECI	AQLKDL	PEHL	KLTT	LGHLEK	AVVL	ELTL	KHVKAL	NNL	E	---	MS	CS	GF	QTCARE	VL	QYLAKE	---	NTRDL	KSS	QLV	THL	HRV	SEL	---	SVPLV	YPGL	---
Dre_DEC2	---	EEGKD	AYKL	---	PHRLI	EKKRR	DRI	NECI	AQLKDL	PEHL	KLTT	LGHLEK	AVVL	ELTL	KHVKAL	NNL	E	---	AFHS	GF	QACAKEVL	QYLNKVEN	WITARE	QRC	TRLI	NHL	HKVS	ACF	---	PFPWL	YPGI	---		
Hsa-DEC2	---	DOTKDTYKL	---	PHRLI	EKKRR	DRI	NECI	AQLKDL	PEHL	KLTT	LGHLEK	AVVL	ELTL	KHVKAL	NNL	E	---	AFHS	GF	QTCAKEVL	QYLSRF	ESWIF	PRE	PRC	VQLI	NHL	HAVAT	QF	---	PFPLL	YPGI	---		

[...]

EDXKD

[...]

bHLH

[...]

orange

[...]

PXLYPG

[...]

