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NTDB id 1323 RAOC RS07335 WP 004916218.1	.MLVKKVYGS ¹ AIHGVS ² AQT ³ ITIEVN ⁴ VDQGV ⁵ .GYHLVGLP ⁶ DNA ⁷ IKESSHR ⁸ IS ⁹ AALKNVGY ¹⁰ KLP ¹¹ GKKIT ¹² IN ¹³ MAPADLR ¹⁴ KEGSA ¹⁵	78
NTDB id 193178 BE844 RS11730 WP 011214811.1	MNLAFTTK ¹ TRSTIG ² IVAQP ³ VSV ⁴ EVHLSNGL ⁵ PSFT ⁶ VMVGLAETAV ⁷ KESKDRVRS ⁸ AI ⁹ INSQ ¹⁰ FEFPC ¹¹ RKIT ¹² VNLG ¹³ PANLP ¹⁴ PKTGSG ¹⁵	80
NTDB id 1271 LPP RS03220 WP 011213198.1	MSLAFTTK ¹ TRSTIG ² IVAQP ³ VSV ⁴ EVHLSNGL ⁵ PSFT ⁶ VMVGLAETAV ⁷ KESKDRVRS ⁸ AI ⁹ INSQ ¹⁰ FEFPC ¹¹ RKIT ¹² VNLG ¹³ PANLP ¹⁴ PKTGSG ¹⁵	80
NTDB id 1248 GC085 RS03150 WP 011213198.1	MSLAFTTK ¹ TRSTIG ² IVAQP ³ VSV ⁴ EVHLSNGL ⁵ PSFT ⁶ VMVGLAETAV ⁷ KESKDRVRS ⁸ AI ⁹ INSQ ¹⁰ FEFPC ¹¹ RKIT ¹² VNLG ¹³ PANLP ¹⁴ PKTGSG ¹⁵	80
NTDB id 1153 A1552VC RS00115 WP 000521788.1	MGLAI ¹ IHSRAS ² IGVQ ³ APPV ⁴ TVEVH ⁵ ISNGMPGFTLVGL ⁶ PETT ⁷ VKESR ⁸ DRVRS ⁹ AI ¹⁰ INSR ¹¹ FEFPA ¹² KRIT ¹³ VNLAPADLP ¹⁴ KEGGR ¹⁵	80
NTDB id 1397 DSB67 RS15690 WP 005535577.1	MGLAI ¹ IHSRAS ² VG ³ VQ ⁴ APSV ⁵ VSV ⁶ EVHISNGMPGFTLVGL ⁷ PETT ⁸ VKESK ⁹ DRVRS ¹⁰ AI ¹¹ VNSNFQ ¹² FPA ¹³ KRIT ¹⁴ VNLAPADLP ¹⁵ KEGGR	80
NTDB id 1349 HI 1117 AAC22771.1	MSLAIV ¹ YSRAS ² MGVQ ³ APLV ⁴ TIEVH ⁵ ISNGKPGFTLVGL ⁶ PEKT ⁷ VKEA ⁸ QDRVRS ⁹ ALMNA ¹⁰ QFKY ¹¹ PAKRIT ¹² VNLAPADLP ¹³ KEGGR ¹⁴	80
NTDB id 1387 A4U84 RS06900 WP 020457569.1	MSLAII ¹ YSRAS ² IGVE ³ APLV ⁴ TIEVH ⁵ ISGGSPGLTLVGL ⁶ PEKS ⁷ VKEA ⁸ QDRVRS ⁹ ALMNA ¹⁰ NFDY ¹¹ PARRIT ¹² INLAPADLP ¹³ KEGGR ¹⁴	80
consensus	* ! * * * * * ! * ! * * * * * ! * * * * * ! * * * * * ! * * * * * ! * * * * * ! * * * * * ! * * * * * ! * * * * * !	

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NTDB id 1323 RAOC RS07335 WP 004916218.1	FDLP ¹ IALG ² ILAA ³ SSQ ⁴ IL ⁵ KNY ⁶ EEG ⁷ ELALSG ⁸ LRGV ⁹ SGY ¹⁰ PAV ¹¹ LA ¹² AA ¹³ HK ¹⁴ DN ¹⁵ QHL ¹⁶ IIANANAAEAS ¹⁷ LTGH ¹⁸ PKV ¹⁹ FTANN ²⁰	158
NTDB id 193178 BE844 RS11730 WP 011214811.1	FDP ¹ LPIALG ² ILAA ³ SE ⁴ QI ⁵ PLTN ⁶ LANHE ⁷ FIGELALSG ⁸ ELRGV ⁹ SAI ¹⁰ IPAV ¹¹ LA ¹² AA ¹³ HK ¹⁴ .DN ¹⁵ QHL ¹⁶ IIANANAAEAS ¹⁷ LTGH ¹⁸ PKV ¹⁹ FTANN ²⁰	159
NTDB id 1271 LPP RS03220 WP 011213198.1	FDP ¹ LPIALG ² ILAA ³ SE ⁴ QI ⁵ PLTN ⁶ LANHE ⁷ FIGELALSG ⁸ ELRGV ⁹ SAI ¹⁰ IPAV ¹¹ LA ¹² AA ¹³ HK ¹⁴ .DN ¹⁵ QHL ¹⁶ IIANANAAEAS ¹⁷ LTGH ¹⁸ QKV ¹⁹ FTANN ²⁰	159
NTDB id 1248 GC085 RS03150 WP 011213198.1	FDP ¹ LPIALG ² ILAA ³ SE ⁴ QI ⁵ PLTN ⁶ LANHE ⁷ FIGELALSG ⁸ ELRGV ⁹ SAI ¹⁰ IPAV ¹¹ LA ¹² AA ¹³ HK ¹⁴ .DN ¹⁵ QHL ¹⁶ IIANANAAEAS ¹⁷ LTGH ¹⁸ QKV ¹⁹ FTANN ²⁰	159
NTDB id 1153 A1552VC RS00115 WP 000521788.1	FDP ¹ LPIALG ² ILAA ³ SD ⁴ QI ⁵ ARNK ⁶ LESY ⁷ EF ⁸ IGELALSG ⁹ ELRGV ¹⁰ KGV ¹¹ LPAA ¹² LAANQ ¹³ .VER ¹⁴ CLV ¹⁵ PHS ¹⁶ NGD ¹⁷ QA ¹⁸ ALV ¹⁹ GVER ²⁰ HK ²¹ SAQS	159
NTDB id 1397 DSB67 RS15690 WP 005535577.1	FDP ¹ LPIALG ² ILAA ³ SE ⁴ QI ⁵ ATDK ⁶ LK ⁷ NY ⁸ EFV ⁹ GELALSG ¹⁰ GLR ¹¹ TVK ¹² GV ¹³ LPAA ¹⁴ LAANQ ¹⁵ .K ¹⁶ QRH ¹⁷ L ¹⁸ V ¹⁹ PHANG ²⁰ DQA ²¹ ALV ²² GKE ²³ QHK ²⁴ SAQS	159
NTDB id 1349 HI 1117 AAC22771.1	FDP ¹ LPIA ² IGILAAS ³ D ⁴ LDASH ⁵ LK ⁶ Q ⁷ FE ⁸ VAELAL ⁹ TG ¹⁰ QLRGV ¹¹ HGV ¹² IPAT ¹³ ILAA ¹⁴ QK ¹⁵ .SK ¹⁶ REL ¹⁷ II ¹⁸ AKQ ¹⁹ NANEAS ²⁰ LVSD ²¹ QNTY ²² FAQT	159
NTDB id 1387 A4U84 RS06900 WP 020457569.1	FDP ¹ LPIA ² IGILAAS ³ Q ⁴ IDSD ⁵ KL ⁶ KRI ⁷ EL ⁸ LGEL ⁹ SL ¹⁰ TGH ¹¹ LRGV ¹² HGA ¹³ IPAV ¹⁴ LAASK ¹⁵ .AK ¹⁶ RE ¹⁷ TI ¹⁸ V ¹⁹ PQQ ²⁰ NANEV ²¹ SLVS ²² NTQT ²³ YCAST	159
consensus	* ! * ! * ! * ! * ! * ! * ! * * * * * * * * * * * * * * * ! * * * * * * * * * * * * * * *	

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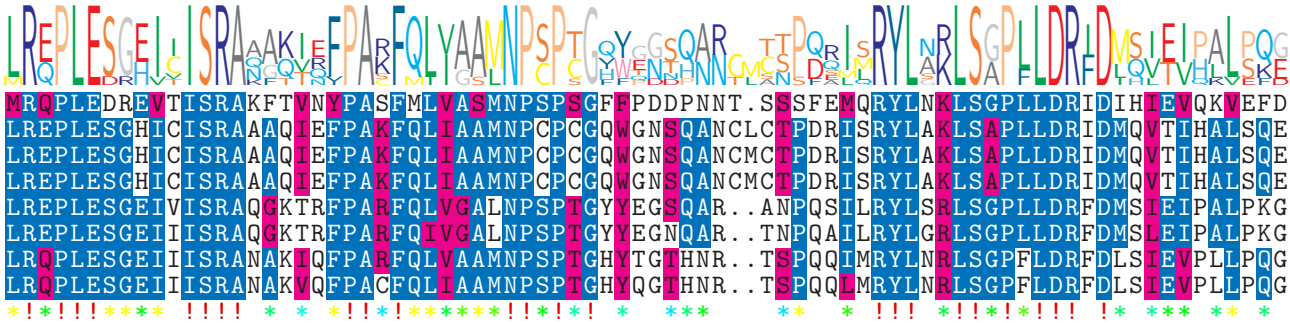
NTDB id 1323 RAOC RS07335 WP 004916218.1	LLEV ¹ CDY ² LCQ ³ GTS ⁴ LQNL ⁵ P ⁶ PKPDL ⁷ ...LFN ⁸ NH ⁹ ELD ¹⁰ W ¹¹ SD ¹² IK ¹³ GQ ¹⁴ Q ¹⁵ HAK ¹⁶ NAM ¹⁷ VIA ¹⁸ ACG ¹⁹ GHS ²⁰ ILL ²¹ SG ²² APG ²³ SG ²⁴ KTM ²⁵ AKR ²⁶ FS ²⁷ TLL ²⁸	238
NTDB id 193178 BE844 RS11730 WP 011214811.1	LREV ¹ CDY ² LCQ ³ GTS ⁴ LQNL ⁵ P ⁶ PKPDL ⁷ ...LFN ⁸ NH ⁹ ELD ¹⁰ W ¹¹ SD ¹² IK ¹³ GQ ¹⁴ Q ¹⁵ HAK ¹⁶ NAM ¹⁷ VIA ¹⁸ ACG ¹⁹ GHS ²⁰ ILL ²¹ SG ²² APG ²³ SG ²⁴ KTM ²⁵ AKR ²⁶ FS ²⁷ TLL ²⁸	235
NTDB id 1271 LPP RS03220 WP 011213198.1	LREV ¹ CDY ² LCQ ³ GTS ⁴ LQNL ⁵ P ⁶ PKPDL ⁷ ...LFN ⁸ NH ⁹ ELD ¹⁰ W ¹¹ SD ¹² IK ¹³ GQ ¹⁴ Q ¹⁵ HAK ¹⁶ NAM ¹⁷ VIA ¹⁸ ACG ¹⁹ GHS ²⁰ ILL ²¹ SG ²² APG ²³ SG ²⁴ KTM ²⁵ AKR ²⁶ FS ²⁷ TLL ²⁸	235
NTDB id 1248 GC085 RS03150 WP 011213198.1	LREV ¹ CDY ² LCQ ³ GTS ⁴ LQNL ⁵ P ⁶ PKPDL ⁷ ...LFN ⁸ NH ⁹ ELD ¹⁰ W ¹¹ SD ¹² IK ¹³ GQ ¹⁴ Q ¹⁵ HAK ¹⁶ NAM ¹⁷ VIA ¹⁸ ACG ¹⁹ GHS ²⁰ ILL ²¹ SG ²² APG ²³ SG ²⁴ KTM ²⁵ AKR ²⁶ FS ²⁷ TLL ²⁸	235
NTDB id 1153 A1552VC RS00115 WP 000521788.1	LLEV ¹ CAD ² LCG ³ QQT ⁴ LS ⁵ LFQ ⁶ SS ⁷ PSV ⁸ ...QQV ⁹ SQ ¹⁰ TRD ¹¹ LQ ¹² DI ¹³ IG ¹⁴ QQ ¹⁵ G ¹⁶ KRA ¹⁷ LEIA ¹⁸ AA ¹⁹ AG ²⁰ NH ²¹ NLL ²² FL ²³ G ²⁴ PPG ²⁵ TG ²⁶ KTML ²⁷ AS ²⁸ RL ²⁹ CD ³⁰ LL	235
NTDB id 1397 DSB67 RS15690 WP 005535577.1	LLEV ¹ CAEL ² CG ³ HQ ⁴ LN ⁵ LY ⁶ Q ⁷ TP ⁸ KKK ⁹ ...ELK ¹⁰ AH ¹¹ GRD ¹² LQ ¹³ DI ¹⁴ IG ¹⁵ QQ ¹⁶ G ¹⁷ KRA ¹⁸ LEIA ¹⁹ AA ²⁰ AG ²¹ NH ²² NLL ²³ FL ²⁴ G ²⁵ PPG ²⁶ TG ²⁷ KTML ²⁸ AS ²⁹ RL ³⁰ CD ³¹ LL	235
NTDB id 1349 HI 1117 AAC22771.1	LL ¹ DV ² VQ ³ FL ⁴ NG ⁵ QEK ⁶ L ⁷ PLATE ⁸ IV ⁹ KESAV ¹⁰ NFSG ¹¹ KNT ¹² LD ¹³ LD ¹⁴ II ¹⁵ G ¹⁶ Q ¹⁷ Q ¹⁸ HAK ¹⁹ RAL ²⁰ TIAA ²¹ AG ²² QH ²³ NLL ²⁴ FL ²⁵ G ²⁶ PPG ²⁷ TG ²⁸ KTML ²⁹ AS ³⁰ RL ³¹ TG ³² LL	239
NTDB id 1387 A4U84 RS06900 WP 020457569.1	LL ¹ QV ² VN ³ FL ⁴ NN ⁵ RD ⁶ L ⁷ PIA ⁸ Q ⁹ LS ¹⁰ QNIA ¹¹ EN ¹² .R ¹³ PL ¹⁴ VSR ¹⁵ DL ¹⁶ DI ¹⁷ IG ¹⁸ Q ¹⁹ Q ²⁰ HAK ²¹ RAL ²² IIA ²³ AS ²⁴ G ²⁵ QH ²⁶ NLL ²⁷ FL ²⁸ G ²⁹ PPG ³⁰ TG ³¹ KTML ³² AS ³³ RL ³⁴ AD ³⁵ LL	238
consensus	* * ! * * * * * ! * * * * * ! * * * * * ! * * * * * ! * * * * * ! * * * * * ! * * * * * ! * * * * * !	

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NTDB id 1323 RAOC RS07335 WP 004916218.1	P ¹ EL ² TL ³ KEA ⁴ LE ⁵ TTK ⁶ IHS ⁷ VAG ⁸ KMG ⁹ AETSL ¹⁰ MT ¹¹ IR ¹² PF ¹³ SP ¹⁴ PH ¹⁵ HT ¹⁶ ISD ¹⁷ VAL ¹⁸ VGG ¹⁹ SS ²⁰ YP ²¹ QP ²² GEIS ²³ LAH ²⁴ NG ²⁵ VL ²⁶ FL ²⁷ DEM ²⁸ PE ²⁹ FK ³⁰ RT ³¹ V ³² LEV	318
NTDB id 193178 BE844 RS11730 WP 011214811.1	PEL ¹ SET ² QALE ³ CA ⁴ AIN ⁵ SIR ⁶ GKL ⁷ PDF ⁸ .REW ⁹ RL ¹⁰ PP ¹¹ FRAP ¹² PH ¹³ HT ¹⁴ ASP ¹⁵ VAL ¹⁶ VGG ¹⁷ NPP ¹⁸ KP ¹⁹ GEIS ²⁰ LAH ²¹ NG ²² VL ²³ FL ²⁴ DEL ²⁵ PE ²⁶ FNR ²⁷ QV ²⁸ LET	314
NTDB id 1271 LPP RS03220 WP 011213198.1	PEL ¹ SET ² QALE ³ CA ⁴ AIN ⁵ SIR ⁶ GKL ⁷ PDF ⁸ .REW ⁹ RL ¹⁰ PP ¹¹ FRAP ¹² PH ¹³ HT ¹⁴ ASP ¹⁵ VAL ¹⁶ VGG ¹⁷ NPP ¹⁸ KP ¹⁹ GEIS ²⁰ LAH ²¹ NG ²² VL ²³ FL ²⁴ DEL ²⁵ PE ²⁶ FNR ²⁷ QV ²⁸ LET	314
NTDB id 1248 GC085 RS03150 WP 011213198.1	PEL ¹ SET ² QALE ³ CA ⁴ AIN ⁵ SIR ⁶ GKL ⁷ PDF ⁸ .REW ⁹ RL ¹⁰ PP ¹¹ FRAP ¹² PH ¹³ HT ¹⁴ ASP ¹⁵ VAL ¹⁶ VGG ¹⁷ NPP ¹⁸ KP ¹⁹ GEIS ²⁰ LAH ²¹ NG ²² VL ²³ FL ²⁴ DEL ²⁵ PE ²⁶ FNR ²⁷ QV ²⁸ LET	314
NTDB id 1153 A1552VC RS00115 WP 000521788.1	PEMS ¹ DEE ² EAM ³ ETAS ⁴ IAS ⁵ LT ⁶ Q ⁷ Q ⁸ EIN ⁹ Q ¹⁰ .HN ¹¹ WK ¹² LP ¹³ FRAP ¹⁴ PH ¹⁵ SS ¹⁶ SMA ¹⁷ ALV ¹⁸ GG ¹⁹ TIP ²⁰ RP ²¹ GEIS ²² LAH ²³ NG ²⁴ LL ²⁵ FL ²⁶ DEM ²⁷ PE ²⁸ FER ²⁹ KV ³⁰ LD ³¹ SD	314
NTDB id 1397 DSB67 RS15690 WP 005535577.1	PEMS ¹ DEE ² EAM ³ ETAS ⁴ VAS ⁵ LT ⁶ Q ⁷ SEINE ⁸ .HN ⁹ WK ¹⁰ TR ¹¹ PP ¹² FRAP ¹³ PH ¹⁴ SS ¹⁵ SMA ¹⁶ ALV ¹⁷ GG ¹⁸ SV ¹⁹ PR ²⁰ GEIS ²¹ LAH ²² NG ²³ LL ²⁴ FL ²⁵ DEM ²⁶ PE ²⁷ FER ²⁸ KV ²⁹ LD ³⁰ SD	314
NTDB id 1349 HI 1117 AAC22771.1	PEMT ¹ DL ² EAI ³ ETAS ⁴ VS ⁵ TL ⁶ VQ ⁷ NEL ⁸ NF ⁹ .HN ¹⁰ WK ¹¹ QR ¹² PP ¹³ FRAP ¹⁴ PH ¹⁵ SS ¹⁶ AMP ¹⁷ ALV ¹⁸ GG ¹⁹ TIP ²⁰ KP ²¹ GEIS ²² LAH ²³ NG ²⁴ VL ²⁵ FL ²⁶ DEL ²⁷ PE ²⁸ FER ²⁹ KV ³⁰ LD ³¹ SD	318
NTDB id 1387 A4U84 RS06900 WP 020457569.1	PEMED ¹ DEAI ² ETAS ³ VS ⁴ TL ⁵ VQ ⁶ NEL ⁷ NF ⁸ .QN ⁹ WK ¹⁰ QR ¹¹ PP ¹² FRAP ¹³ PH ¹⁴ SS ¹⁵ AMP ¹⁶ ALV ¹⁷ GG ¹⁸ SIP ¹⁹ KP ²⁰ GEIS ²¹ LAH ²² NG ²³ VL ²⁴ FL ²⁵ DEL ²⁶ PE ²⁷ FER ²⁸ KV ²⁹ LD ³⁰ SD	317
consensus	! * * * * * * ! * * * * * * * ! * * * * * ! * * * * * ! * * * * * ! * * * * * ! * * * * * ! * * * * * !	

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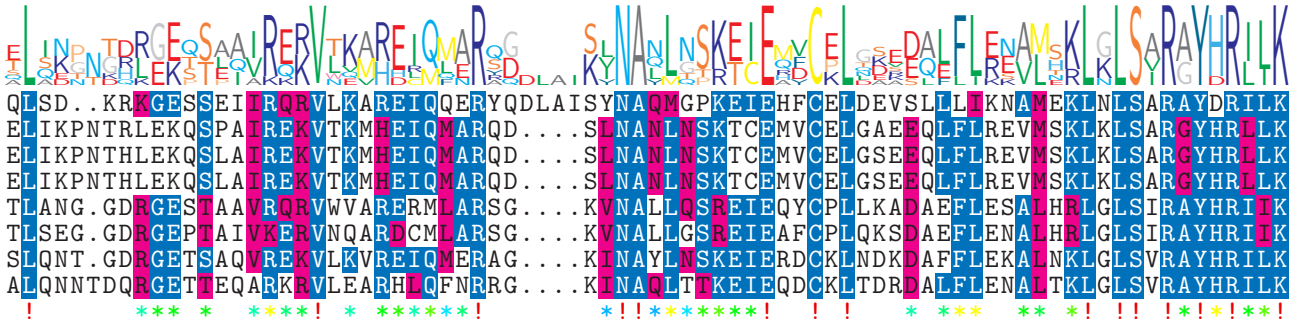
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NTDB id 1387 A4U84 RS06900 WP 020457569.1
consensus



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☒ non conserved
☒ similar
☒ ≥ 50% conserved