

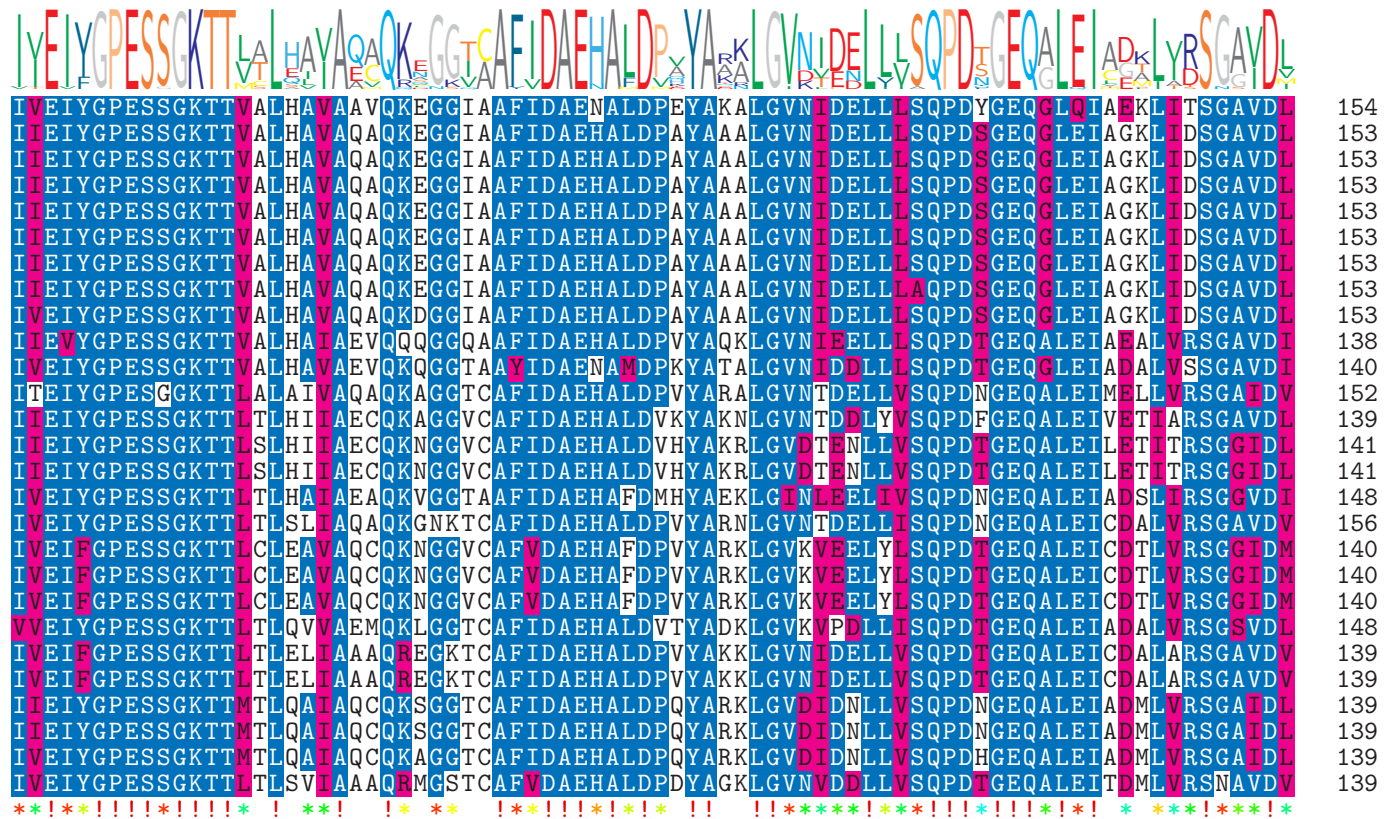
logo

NTDB id 600 KW2 RS01765 WP 011675413.1	MATKK....KTNFDDITKKYGA	ERDKALADALALIEKD	FGKGSIMRLGEA	.ANQKVS	VSSGSLALD	I	ALGAGGY	PKGR	74
NTDB id 269 KZH43 RS08665 WP 001085462.1	.MAKK....PKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 228 SPD RS09265 WP 001085462.1	.MAKK....PKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 194 SPR RS08825 WP 001085462.1	.MAKK....PKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 159 SP RS09750 WP 001085462.1	.MAKK....PKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 527 SMSK321 RS11065 WP 001085454.1	.MAKK....PKKLDEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 499 SM12261 RS08315 WP 078228268.1	.MAKK....PKKLDEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 453 Spy49 1753c ACI62003.1	.MAKK....LKKNEEITKKFG	DERRKALDDALKNIEKD	FGKGAVMRLGER	.AEQKVQVM	SSGSLALD	I	ALGAGGY	PKGR	73
NTDB id 408 SMU RS09530 WP 002262392.1	.MAKR....IKKTEEITKKFG	DERKKALDDALKNIEKD	FGKGAVMRLGER	.AEQKVQVM	SSGSLALD	I	ALGAGGY	PKGR	73
NTDB id 115 BSU 16940 NP 389576.2	MSDRQAALDMALK	QIEKQFGKGSIMKLGEK	.TDTRIST	VP	SGSLALD	T	ALGIGGY	PRGR	58
NTDB id 625 LCA RS02525 WP 011374196.1	MAKDERQAALDAALKK	IEKNFGKGSIMRMGEK	.VDTQVST	VSSGSLAL	DEALGVGGY	PRGR			60
NTDB id 1313 DR RS12030 WP 010888966.1	MSKDATKEISAPTD	AKERSKATETAM	SQIEKAFGKGSIMKLGAE	.SKLDVQV	VSTGSLSLD	I	ALGVGGI	PRGR	72
NTDB id 1245 Cj1673c YP 002345041.1	MDDNKRKSLDAALKS	LDKTFGKGTILRLGDK	.EVEQIDS	IGTGSVGLD	I	ALGIGGV	PKGR		59
NTDB id 1214 NCTC11637 00359 SQJ03206.1	MAIDEDKQKAI	SLAIKQIDKVF	FGKGALVRLGDK	.QVEKIDA	ISTGSLGLD	I	ALGIGGV	PKGR	61
NTDB id 1211 C694 RS00795 WP 000963128.1	MAIDEDKQKAI	SLAIKQIDKVF	FGKGALVRLGDK	.QVEKIDS	ISTGSLGLD	I	ALGIGGV	PKGR	61
NTDB id 1334 RAOC RS04870 WP 004918236.1	MAKT..ETTS	PNDDKKKALAAVLEK	LDKTYGKGTVMKLG	DGTVDHNI	EVIPSGSLGLD	I	ALGVGGY	PKGR	68
NTDB id 1389 A4U84 RS07560 WP 021112712.1	.MAENKKSSKNNTV..VKQ	VEPEQKKQALEAALA	QIEKQFGKGSIMKLGQT	.EQLDIES	VSTGSLGLD	I	ALGIGGL	PMGR	76
NTDB id 1130 NGFG RS03960 WP 003688695.1	MSDDKSKALAAALA	QIEKSFGKGAIMKMDGS	QREENLEVISTGSLGLD	I	ALGVGGL	PRGR			60
NTDB id 1124 NGFG RS03960 WP 003688695.1	MSDDKSKALAAALA	QIEKSFGKGAIMKMDGS	QREENLEVISTGSLGLD	I	ALGVGGL	PRGR			60
NTDB id 1123 OK783 RS03845 WP 003688695.1	MSDDKSKALAAALA	QIEKSFGKGAIMKMDGS	QREENLEVISTGSLGLD	I	ALGVGGL	PRGR			60
NTDB id 1427 RS RS02760 WP 011000510.1	.MEDG.....K..KAAS	MSAEKQKALAAALA	QIEKQFGKGSIMKMDA	.EVEPVQV	VSTGSLGLD	I	ALGVGGL	PRGR	68
NTDB id 1165 A1552VC RS01565 WP 000344154.1	MDENKQKALAAALG	QIEKQFGKGSIMRLGDN	.RAMDVET	ISTGSLSLD	I	ALGAGGL	PMGR		59
NTDB id 1142 GTF74 RS11550 WP 000344154.1	MDENKQKALAAALG	QIEKQFGKGSIMRLGDN	.RAMDVET	ISTGSLSLD	I	ALGAGGL	PMGR		59
NTDB id 224818 B7L35 RS01380 WP 000344169.1	MDENKSKALQAALS	QIEKQFGKNTVMRLGDN	.TVQAVEA	VSTGSLTLD	I	ALGIGGL	PKGR		59
NTDB id 1074 ABD1 RS10195 WP 000344167.1	MDENKSKALQAALS	QIEKQFGKNTVMRLGDN	.TVQAVEA	VSTGSLTLD	I	ALGIGGL	PKGR		59
NTDB id 1022 ACIAD RS06390 WP 004925639.1	MDDNKSKALQAALS	QIEKQFGKNTVMRLGDN	.TVQAVEA	VSTGSLTLD	I	ALGIGGL	PKGR		59
NTDB id 1205 PSJM300 05545 AFN77183.1	MDENKKRALAAALG	QIEKQFGKGAVMRMGDH	.DRQAIPS	ISTGSLGLD	I	ALGIGGL	PKGR		59
consensus	***	***	*	***!	***!	***!	***!	***!	

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NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
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NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 1245 Cj1673c YP 002345041.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1334 RAOC RS04870 WP 004918236.1
NTDB id 1389 A4U84 RS07560 WP 021112712.1
NTDB id 1130 NGFG RS03960 WP 003688695.1
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

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NTDB	id	600	KW2	RS01765	WP	011675413.1	VV	IDSVAALV	PKAEI	DGEI	GDSSVGLQAR	MMSQAMRKL	AGH	INKTKT	TA	IFINQLREK	VGVM	.FGSP	PETTP	GGRA	LKFYA	233			
NTDB	id	269	KZH43	RS08665	WP	001085462.1	VVV	DSVAALV	PRAEI	DGDI	GDShVGLQAR	MMSQAMRKL	AGS	INKTKT	TA	IFINQLREK	VGVM	.FGNP	PETTP	GGRA	LKFYA	232			
NTDB	id	228	SPD	RS09265	WP	001085462.1	VVV	DSVAALV	PRAEI	DGDI	GDShVGLQAR	MMSQAMRKL	AGS	INKTKT	TA	IFINQLREK	VGVM	.FGNP	PETTP	GGRA	LKFYA	232			
NTDB	id	194	SPR	RS08825	WP	001085462.1	VVV	DSVAALV	PRAEI	DGDI	GDShVGLQAR	MMSQAMRKL	AGS	INKTKT	TA	IFINQLREK	VGVM	.FGNP	PETTP	GGRA	LKFYA	232			
NTDB	id	159	SP	RS09750	WP	001085462.1	VVV	DSVAALV	PRAEI	DGDI	GDShVGLQAR	MMSQAMRKL	AGS	INKTKT	TA	IFINQLREK	VGVM	.FGNP	PETTP	GGRA	LKFYA	232			
NTDB	id	527	SMSK321	RS11065	WP	001085454.1	VVV	DSVAALV	PRAEI	DGDI	GDShVGLQAR	MMSQAMRKL	AGS	INKTKT	TA	IFINQLREK	VGVM	.FGNP	PETTP	GGRA	LKFYA	232			
NTDB	id	499	SM12261	RS08315	WP	078228268.1	VVV	DSVAALV	PRAEI	DGDI	GDShVGLQAR	MMSQAMRKL	AGS	INKTKT	TA	IFINQLREK	VGVM	.FGNP	PETTP	GGRA	LKFYA	232			
NTDB	id	453	Spy49	1753c	ACI	62003.1	VVV	DSVAALV	PRAEI	DGDI	GDShVGLQAR	MMSQAMRKL	SAS	INKTKT	TA	IFINQLREK	VGVM	.FGNP	PETTP	GGRA	LKFYA	232			
NTDB	id	408	SMU	RS09530	WP	002262392.1	VVV	DSVAALV	PRAEI	DGDI	GDShVGLQAR	MMSQAMRKL	SAS	INKTKT	TA	IFINQLREK	VGIM	.FGNP	PETTP	GGRA	LKFYS	232			
NTDB	id	115	BSU	16940	NP	389576.2	VVV	DSVAALV	PKAEI	EGDM	GDShVGLQAR	LSQALRKL	SGA	INKTKT	TA	IFINQIREK	VGVM	.FGNP	PETTP	GGRA	LKFYS	217			
NTDB	id	625	LCA	RS02525	WP	011374196.1	LV	DSVAALV	PRAEI	EGEM	GDH	VGLQAR	LSQALRKL	SGT	INKTKT	TA	LFINQIREK	VGVM	.FGNPE	VTP	GGRA	LKFYS	219		
NTDB	id	1313	DR	RS12030	WP	010888966.1	VVV	DSVAAL	TPRAEI	EGDM	GD	SLPGLQAR	LSQALRKL	TA	ILSKTGT	AA	IFINQVREK	IGVM	.YGN	PETTT	GGRA	LKFYA	231		
NTDB	id	1245	Cj1673c	YP	002345041.1	IV	VDSVAAL	TPKAEI	EGDM	MGDQ	HVGLQAR	LSQALRKL	TG	IVHKMNT	TV	IFINQ	IRMKIGAM	GYGT	PETTT	GGN	NALKFYA	219			
NTDB	id	1214	NCTC11637	00359	SQJ	03206.1	VVV	DSVAAL	TPKAEI	DGDM	MGDQ	HVGLQAR	LSH	ALRKIT	GV	LHKMNT	TL	IFINQ	IRMKIGM	MGY	GS	PETTT	GGN	NALKFYA	221
NTDB	id	1211	C694	RS00795	WP	000963128.1	VVV	DSVAAL	TPKAEI	DGDM	MGDQ	HVGLQAR	LSH	ALRKIT	GV	LHKMNT	TL	IFINQ	IRMKIGM	MGY	GS	PETTT	GGN	NALKFYA	221
NTDB	id	1334	RAOC	RS04870	WP	004918236.1	VVV	DSVAAL	TPKAEI	DGDM	GD	SMGLHAR	LSQALRKL	TSS	ISKTKCTV		IFINQLRDK	IGVM	.FGSP	PETTT	GGN	NALKFYA	227		
NTDB	id	1389	A4U84	RS07560	WP	021112712.1	II	VDSVAAL	TPKAEI	EGDM	GD	SHMGLQAR	LSQALRKL	TAN	IKNTNCL	LV	VFINQ	IRMKIGVM	.FGNP	PETTT	GGN	NALKFYA	235		
NTDB	id	1130	NGFG	RS03960	WP	003688695.1	VVV	DSVAALV	PKAEI	EGDM	GD	SHVGLQAR	LSQALRKL	TG	HIKKTNTL	V	VFINQ	IRMKIGVM	.FGSP	PETTT	GGN	NALKFYS	219		
NTDB	id	1124	NGFG	RS03960	WP	003688695.1	VVV	DSVAALV	PKAEI	EGDM	GD	SHVGLQAR	LSQALRKL	TG	HIKKTNTL	V	VFINQ	IRMKIGVM	.FGSP	PETTT	GGN	NALKFYS	219		
NTDB	id	1123	OK783	RS03845	WP	003688695.1	VVV	DSVAALV	PKAEI	EGDM	GD	SHVGLQAR	LSQALRKL	TG	HIKKTNTL	V	VFINQ	IRMKIGVM	.FGSP	PETTT	GGN	NALKFYS	219		
NTDB	id	1427	RS	RS02760	WP	011000510.1	IV	DSVAALV	PKAEI	EGEM	GD	SLPGLQAR	LSQALRKL	TG	IKRTNCL	V	IFINQ	IRMKIGVM	.FGSP	PETTT	GGN	NALKF			

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NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

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NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

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Sequence	Score
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DEKIGQGS ENAKKYLAEHPEIFDEIDKQVRSKFLIDGEEVSEQDTE.NKKDE.....PKKEEA..VNEEVPLDLGDEL	382
DEKIGQGS ENAKKYLAEHPEIFDEIDKQVRSKFLIDGEEVSEQDTE.NKKDE.....PKKEEA..VNEEVPLDLGDEL	382
DEKIGQGS ENAKKYLAEHPEIFDEIDKQVRSKFLIDGEEVSEQDTE.NKKDE.....PKKEEA..VNEEVPLDLGDEL	382
DEKIGQGS ENAKKYLAENPEVFAEIDHQVRVQFLIDGEEAAE.....SKKDE.....VAQVDS..VNEEVTLDLGDEL	378
DEKIGQGS ENAKKYLAENPEIFDEIDHQVRVQFLIDGEEIAE.....SKKDE.....AAQVDS..VNEEVTLDLGDEL	378
GEKIGQGS ENAKRYLADHPQLFDEIDRKVRVKFGLLEESEEESAMAV.ASE.....E.....TDDLALDLNGI	374
GEKIGQGS ENAKKFLADNPEIFDDIDHKVRVQYGLIEEDNTEEKQSS.KEK.....ETDEK..ADKNLVLELDDTI	379
EERLGQGR ENAKQFLKENKDIMLMIQEQUIREHYGLDNGGVVQQQAEE.TQEEL.E..FE.E.....	348
SERIGQGR ENAKNYLADHEDVEDEVRLKVRAAAYGISDVPEEDLPSTE.DE.QI.N..ILPDDST.....EE.....	355
DERIGQG KECTIAYIAERPMEQEIRDRVMAAIRAGNAGEAPALAPAPAPEAAEA	363
DKKLGQGR ENSKAFLKENPEIADEITKAIQNSMGI EGMISGS..EDDEGE..E.....	343
DKKLGQGR ENAKALLKEDKALADEITLKIKESIGSNEEIMPL..PDEPLE..EME.....	347
DKKLGQGR ENAKALLKEDKALADEITLKIKESIGSNEEIMPL..PDEPLE..EME.....	347
DTKLGQGR DTVKELIKDNPELAELEAKIREKLQAK	343
GTKIGQG KNNNAVKWLKENPEIADKLEQIRNTLASNPNSVLK..ATASDSND ESDVEEFSE.....EEL.....	372
GAKIGQGDKNVRVWLKENPEISDEIDAKIRALNGVEMHITEG..TQDET.....GERPE.....E.....	348
GAKIGQGDKNVRVWLKENPEISDEIDAKIRALNGVEMHITEG..TQDET.....GERPE.....E.....	348
GAKIGQGDKNVRVWLKENPEISDEIDAKIRALNGVEMHITEG..TQDET.....GERPE.....E.....	348
GERIGQGR DNRNREFLRENAELAREIENKVRHGLVTPMGAV..TLAEEVEED.....	352
GDKIGQG KANACKYLKENPEIAKTLKKLREMLLNPNMQLI..AETSSAADVEFGAVPE.....EF.....	354
GDKIGQG KANACKYLKENPEIAKTLKKLREMLLNPNMQLI..AETSSAADVEFGAVPE.....EF.....	354
GNKIGQG KNNVIRYFEENTQIAEEIERNIREQLLTGTNGAV..Q.I.EDEEPPD..LLE.....S.....	349
GNKIGQG KNNVIRYFEENNQIAEEIERNIREQLLTGTNGAV..Q.I.EDEEPPD..LLE.....S.....	349
GNKIGQG KNNVIRYLEENPQISTEIEAVIREQLLTKASDQTA..A.HDETEEPPD..LLES.....	349
GSKIGQG KANAAYLEENPEIQEIEQQIRAKLLVTSANTKA..TPVAEDLADAD..I.....	347

logo

	E	I	E	L	E	E	
NTDB id 600 KW2 RS01765 WP 011675413.1							387
NTDB id 269 KZH43 RS08665 WP 001085462.1	EIEIEE						388
NTDB id 228 SPD RS09265 WP 001085462.1	EIEIEE						388
NTDB id 194 SPR RS08825 WP 001085462.1	EIEIEE						388
NTDB id 159 SP RS09750 WP 001085462.1	EIEIEE						388
NTDB id 527 SMSK321 RS11065 WP 001085454.1	EIEIEE						384
NTDB id 499 SM12261 RS08315 WP 078228268.1	EIEIEE						384
NTDB id 453 Spy49 1753c ACI62003.1	EIED..						378
NTDB id 408 SMU RS09530 WP 002262392.1	ELED..						383
NTDB id 115 BSU 16940 NP 389576.2							348
NTDB id 625 LCA RS02525 WP 011374196.1							355
NTDB id 1313 DR RS12030 WP 010888966.1							363
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NTDB id 1074 ABD1 RS10195 WP 000344167.1							349
NTDB id 1022 ACIAD RS06390 WP 004925639.1							349
NTDB id 1205 PSJM300 05545 AFN77183.1							347
consensus							

-  non conserved
-  similar
-  ≥ 50% conserved