

logo



NTDB id 600 KW2 RS01765 WP 011675413.1	.....MATKKKTNFDDITKKYGA	ERDKALADALALIEKDFGKGSIMRLG	EA	.ANQK	VS	VSSGSLALDIALGAGGYPKGR	74
NTDB id 269 KZH43 RS08665 WP 001085462.1	.....MAKKPKLEEISKKFGA	EREKALNDALKLEKDFGKGSIMRLG	ER	.AEQK	VQMSSGSLALDIALGSGGYPKGR	73	
NTDB id 228 SPD RS09265 WP 001085462.1	.....MAKKPKLEEISKKFGA	EREKALNDALKLEKDFGKGSIMRLG	ER	.AEQK	VQMSSGSLALDIALGSGGYPKGR	73	
NTDB id 194 SPR RS08825 WP 001085462.1	.....MAKKPKLEEISKKFGA	EREKALNDALKLEKDFGKGSIMRLG	ER	.AEQK	VQMSSGSLALDIALGSGGYPKGR	73	
NTDB id 159 SP RS09750 WP 001085462.1	.....MAKKPKLEEISKKFGA	EREKALNDALKLEKDFGKGSIMRLG	ER	.AEQK	VQMSSGSLALDIALGSGGYPKGR	73	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	.....MAKKPKLDEISKKFGA	EREKALNDALKLEKDFGKGSIMRLG	ER	.AEQK	VQMSSGSLALDIALGSGGYPKGR	73	
NTDB id 499 SM12261 RS08315 WP 078228268.1	.....MAKKPKLDEISKKFGA	EREKALNDALKLEKDFGKGSIMRLG	ER	.AEQK	VQMSSGSLALDIALGSGGYPKGR	73	
NTDB id 408 SMU RS09530 WP 002262392.1	.....MAKRIKTEEITKKFGD	ERRKALDDALKNIEKDFGKGA	VMRLG	.AEQK	VQMSSGSLALDIALGAGGYPKGR	73	
NTDB id 453 Spy49 1753c ACI62003.1	.....MAKKLKKNEEITKKFGD	ERRKALDDALKNIEKDFGKGA	VMRLG	.AEQK	VQMSSGSLALDIALGAGGYPKGR	73	
NTDB id 115 BSU 16940 NP 389576.2	.....MSDRQAALDMALKQIEKQFGKGSIMKLGEK	.TDTR	ISTVPSGSLALDIALGIGGYPGR	58			
NTDB id 625 LCA RS02525 WP 011374196.1	.....MAKDERQAALDAALKKIEKNFGKGSIMRMGEK	.VDTQ	VSTVSSGSLALDEALGVGGYPGR	60			
NTDB id 1313 DR RS12030 WP 010888966.1	.....MSKDAT.KEISAPTDAKERSKATETAMSQIEKAFGKGSIMKLGAE	.SKLD	VQVSTGSLSLDLALGVGGIPGR	72			
NTDB id 1245 Cj1673c YP 002345041.1	.....MDDNKRKSLDAALKSLDKTFGKGTILRLGDK	.EVEQ	IDSIGTGSVGLDLALGIGGVPKGR	59			
NTDB id 1214 NCTC11637 00359 SQJ03206.1	.....M.AIDEDKQKATSLAIKQIDKVFGKGALVRLGDK	.QVEK	IDAISTGSLGLDLALGIGGVPKGR	61			
NTDB id 1211 C694 RS00795 WP 000963128.1	.....M.AIDEDKQKATSLAIKQIDKVFGKGALVRLGDK	.QVEK	IDSISTGSLGLDLALGIGGVPKGR	61			
NTDB id 1334 RAOC RS04870 WP 004918236.1	.....MA...K.TETT..SPND	DKK	KALAAVLEKLDKTYGKGTVMKLG	GTVDHN	IEVIPSGSLGLDLALGVGGYPKGR	68	
NTDB id 1013712 ABWH87 RS07325 WP 306051318.1	.....MAQNNL.RLVE..GKSV	DKSKALDAALAQIERS	FGKGSIMRLGVNEQVVE	IETV	STGSLGLDIALGVGGLPKGR	71	
NTDB id 1389 A4U84 RS07560 WP 021112712.1	MAENKSSKNNT.VVKQ..VEPEQ	KKQALEAALAQIEKQFGKGSIMKLGQT	.EQLD	IESV	STGSLGLDLALGIGGLPMGR	76	
NTDB id 1130 NGFG RS03960 WP 003688695.1	.....MSD	DKSKALAAALAQIEKSFGKGAIMKMDGSQ	QREEN	LEVI	STGSLGLDLALGVGGLPGR	60	
NTDB id 1124 NGFG RS03960 WP 003688695.1	.....MSD	DKSKALAAALAQIEKSFGKGAIMKMDGSQ	QREEN	LEVI	STGSLGLDLALGVGGLPGR	60	
NTDB id 1123 OK783 RS03845 WP 003688695.1	.....MSD	DKSKALAAALAQIEKSFGKGAIMKMDGSQ	QREEN	LEVI	STGSLGLDLALGVGGLPGR	60	
NTDB id 1427 RS RS02760 WP 011000510.1	MEDG.....KKA..SMSA	EKQKALAAALAQIEKQFGKGSIMKMGDA	.EVEP	VQV	STGSLGLDVALGVGGLPGR	68	
NTDB id 1165 A1552VC RS01565 WP 000344154.1	.....MDEN	KQKALAAALGQIEKQFGKGSIMRLG	DN	.RAMD	VETISTGSLSLDIALGAGGLPMGR	59	
NTDB id 1142 GTF74 RS11550 WP 000344154.1	.....MDEN	KQKALAAALGQIEKQFGKGSIMRLG	DN	.RAMD	VETISTGSLSLDIALGAGGLPMGR	59	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	.....MDDN	KSKALQAALSQIEKQFGKNTVMRLG	DN	.TVQA	VEAVSTGSLTLDIALGIGGLPKGR	59	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	.....MDEN	KSKALQAALSQIEKQFGKNTVMRLG	DN	.TVQA	VEAVSTGSLTLDIALGIGGLPKGR	59	
NTDB id 1205 PSJM300 05545 AFN77183.1	.....MDEN	KKRALAAALGQIEKQFGKGA	VMRMDH	.DRQA	IPSI	STGSLGLDIALGIGGLPKGR	59
consensus		* * * * *	* * * * *	* ! ! * * * * * * * * *	*	* * * * ! * * ! * ! ! ! ! ! ! ! ! ! * * ! ! !	

logo



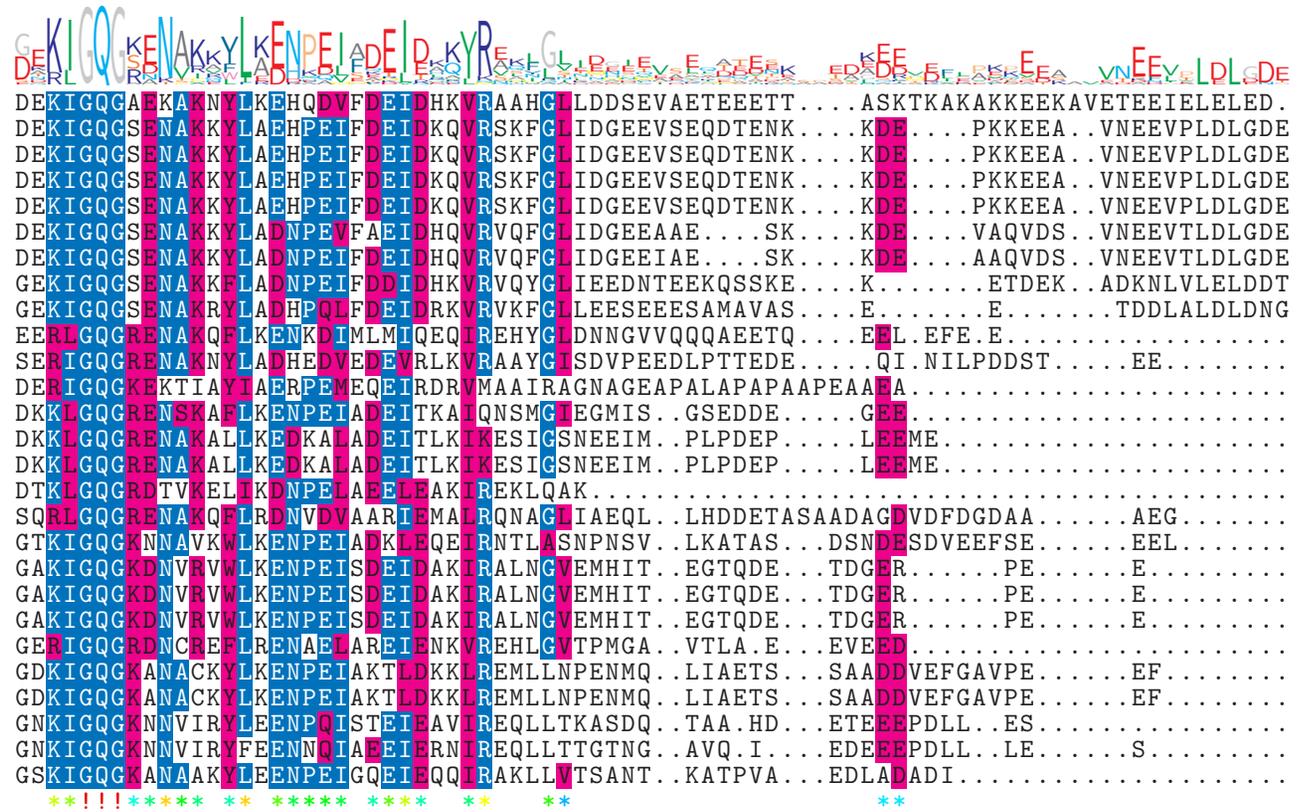
NTDB id 600 KW2 RS01765 WP 011675413.1	I V E I Y G P E S S G K T T V A L H A V A A V Q K E G G I A A F I D A E H A L D P E Y A K A L G V N I D E L L S Q P D Y G E Q G L Q I A E K L I T S G A V D L	154
NTDB id 269 KZH43 RS08665 WP 001085462.1	I I E I Y G P E S S G K T T V A L H A V A A Q A Q K E G G I A A F I D A E H A L D P A Y A A A L G V N I D E L L S Q P D S G E Q G L E I A G K L I D S G A V D L	153
NTDB id 228 SPD RS09265 WP 001085462.1	I I E I Y G P E S S G K T T V A L H A V A A Q A Q K E G G I A A F I D A E H A L D P A Y A A A L G V N I D E L L S Q P D S G E Q G L E I A G K L I D S G A V D L	153
NTDB id 194 SPR RS08825 WP 001085462.1	I I E I Y G P E S S G K T T V A L H A V A A Q A Q K E G G I A A F I D A E H A L D P A Y A A A L G V N I D E L L S Q P D S G E Q G L E I A G K L I D S G A V D L	153
NTDB id 159 SP RS09750 WP 001085462.1	I I E I Y G P E S S G K T T V A L H A V A A Q A Q K E G G I A A F I D A E H A L D P A Y A A A L G V N I D E L L S Q P D S G E Q G L E I A G K L I D S G A V D L	153
NTDB id 527 SMSK321 RS11065 WP 001085454.1	I I E I Y G P E S S G K T T V A L H A V A A Q A Q K E G G I A A F I D A E H A L D P A Y A A A L G V N I D E L L S Q P D S G E Q G L E I A G K L I D S G A V D L	153
NTDB id 499 SM12261 RS08315 WP 078228268.1	I I E I Y G P E S S G K T T V A L H A V A A Q A Q K E G G I A A F I D A E H A L D P A Y A A A L G V N I D E L L S Q P D S G E Q G L E I A G K L I D S G A V D L	153
NTDB id 408 SMU RS09530 WP 002262392.1	I V E I Y G P E S S G K T T V A L H A V A A Q A Q K D G G I A A F I D A E H A L D P A Y A A A L G V N I D E L L S Q P D S G E Q G L E I A G K L I D S G A V D L	153
NTDB id 453 Spy49 1753c ACI62003.1	I I E I Y G P E S S G K T T V A L H A V A A Q A Q K E G G I A A F I D A E H A L D P A Y A A A L G V N I D E L L S Q P D S G E Q G L E I A G K L I D S G A V D L	153
NTDB id 115 BSU 16940 NP 389576.2	I I E V Y G P E S S G K T T V A L H A I A E V Q Q Q G G Q A A F I D A E H A L D P V Y A Q K L G V N I E E L L S Q P D T G E Q A L E I A E A L V R S G A V D I	138
NTDB id 625 LCA RS02525 WP 011374196.1	I V E I Y G P E S S G K T T V A L H A V A E V Q K Q G G T A A Y I D A E N A M D P K Y A T A L G V N I D D L L S Q P D T G E Q G L E I A D A L V S S G A V D I	140
NTDB id 1313 DR RS12030 WP 010888966.1	I T E I Y G P E S S G K T T L A L A I V A Q A Q K A G G T C A F I D A E H A L D P V Y A R A L G V N T D E L L V S Q P D N G E Q A L E I M E L L V R S G A I D V	152
NTDB id 1245 Cj1673c YP 002345041.1	I I E I Y G P E S S G K T T L T L H I I A E C Q K A G G V C A F I D A E H A L D V K Y A K N L G V N T D D L Y V S Q P D F G E Q A L E I V E T I A R S G A V D L	139
NTDB id 1214 NCTC11637 00359 SQJ03206.1	I I E I Y G P E S S G K T T L S L H I I A E C Q K N G G V C A F I D A E H A L D V H Y A K R L G V D T E N L L V S Q P D T G E Q A L E I L E T I T R S G G I D L	141
NTDB id 1211 C694 RS00795 WP 000963128.1	I I E I Y G P E S S G K T T L S L H I I A E C Q K N G G V C A F I D A E H A L D V H Y A K R L G V D T E N L L V S Q P D T G E Q A L E I L E T I T R S G G I D L	141
NTDB id 1334 RAOC RS04870 WP 004918236.1	I V E I Y G P E S S G K T T L T L H A I A E A Q K V G G T A A F I D A E H A F D M H Y A E K L G I N L E E L I V S Q P D N G E Q A L E I A D S L I R S G G V D I	148
NTDB id 1013712 ABWH87 RS07325 WP 306051318.1	I I E I Y G P E S S G K T T M A L H T V A E A Q K E G G I C A F I D A E H A L D P V Y A R K L G V N L E D L L I S Q P D T G E Q A L E I A D T L V R S G A C D V	151
NTDB id 1389 A4U84 RS07560 WP 021112712.1	I V E I Y G P E S S G K T T L T L S L I A Q A Q K G N K T C A F I D A E H A L D P V Y A R N L G V N T D E L L I S Q P D N G E Q A L E I C D A L V R S G A V D V	156
NTDB id 1130 NGFG RS03960 WP 003688695.1	I V E I F G P E S S G K T T L C L E A V A Q C Q K N G G V C A F V D A E H A F D P V Y A R K L G V K V E E L Y L S Q P D T G E Q A L E I C D T L V R S G G I D M	140
NTDB id 1124 NGFG RS03960 WP 003688695.1	I V E I F G P E S S G K T T L C L E A V A Q C Q K N G G V C A F V D A E H A F D P V Y A R K L G V K V E E L Y L S Q P D T G E Q A L E I C D T L V R S G G I D M	140
NTDB id 1123 OK783 RS03845 WP 003688695.1	I V E I F G P E S S G K T T L C L E A V A Q C Q K N G G V C A F V D A E H A F D P V Y A R K L G V K V E E L Y L S Q P D T G E Q A L E I C D T L V R S G G I D M	140
NTDB id 1427 RS RS02760 WP 011000510.1	V V E I Y G P E S S G K T T L T L Q V V A E M Q K L G G T C A F I D A E H A L D V T Y A D K L G V K V P D L L I S Q P D T G E Q A L E I A D A L V R S G S V D L	148
NTDB id 1165 A1552VC RS01565 WP 000344154.1	I V E I F G P E S S G K T T L T L E L I A A A Q R E G K T C A F I D A E H A L D P V Y A K K L G V N I D E L L V S Q P D T G E Q A L E I C D A L A R S G A V D V	139
NTDB id 1142 GTF74 RS11550 WP 000344154.1	I V E I F G P E S S G K T T L T L E L I A A A Q R E G K T C A F I D A E H A L D P V Y A K K L G V N I D E L L V S Q P D T G E Q A L E I C D A L A R S G A V D V	139
NTDB id 1022 ACIAD RS06390 WP 004925639.1	I V E I Y G P E S S G K T T M T L Q A I A Q C Q K A G G T C A F I D A E H A L D P Q Y A R K L G V D I D N L L V S Q P D H G E Q A L E I A D M L V R S G A I D L	139
NTDB id 1074 ABD1 RS10195 WP 000344167.1	I I E I Y G P E S S G K T T M T L Q A I A Q C Q K S G G T C A F I D A E H A L D P Q Y A R K L G V D I D N L L V S Q P D N G E Q A L E I A D M L V R S G A I D L	139
NTDB id 1205 PSJM300 05545 AFN77183.1	I V E I Y G P E S S G K T T L T L S V I A A A Q R M G S T C A F V D A E H A L D P D Y A G K L G V N V D D L L V S Q P D T G E Q A L E I T D M L V R S N A V D V	139
consensus	**!*!!!!!!*!!!!* ! **! !* ** !*!!!!!!*!! !!!!!*!!!!*!! !!!!!*!!!!*!! !!!!!*!!!!*!!	





logo

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  
 NTDB id 159 SP RS09750 WP 001085462.1  
 NTDB id 527 SMSK321 RS11065 WP 001085454.1  
 NTDB id 499 SM12261 RS08315 WP 078228268.1  
 NTDB id 408 SMU RS09530 WP 002262392.1  
 NTDB id 453 Spy49 1753c ACI62003.1  
 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 1013712 ABWH87 RS07325 WP 306051318.1  
 NTDB id 1389 A4U84 RS07560 WP 021112712.1  
 NTDB id 1130 NGFG RS03960 WP 003688695.1  
 NTDB id 1124 NGFG RS03960 WP 003688695.1  
 NTDB id 1123 OK783 RS03845 WP 003688695.1  
 NTDB id 1427 RS RS02760 WP 011000510.1  
 NTDB id 1165 A1552VC RS01565 WP 000344154.1  
 NTDB id 1142 GTF74 RS11550 WP 000344154.1  
 NTDB id 1022 ACIAD RS06390 WP 004925639.1  
 NTDB id 1074 ABD1 RS10195 WP 000344167.1  
 NTDB id 1205 PSJM300 05545 AFN77183.1  
 consensus



logo

	<b>L</b>	<b>E</b>	<b>E</b>	<b>L</b>	<b>E</b>	<b>E</b>	
NTDB id 600 KW2 RS01765 WP 011675413.1	.....						387
NTDB id 269 KZH43 RS08665 WP 001085462.1	LEIEIEE						388
NTDB id 228 SPD RS09265 WP 001085462.1	LEIEIEE						388
NTDB id 194 SPR RS08825 WP 001085462.1	LEIEIEE						388
NTDB id 159 SP RS09750 WP 001085462.1	LEIEIEE						388
NTDB id 527 SMSK321 RS11065 WP 001085454.1	LEIEIEE						384
NTDB id 499 SM12261 RS08315 WP 078228268.1	LEIEIEE						384
NTDB id 408 SMU RS09530 WP 002262392.1	IELED..						383
NTDB id 453 Spy49 1753c ACI62003.1	IEIED..						378
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
NTDB id 1245 Cj1673c YP 002345041.1	.....						343
NTDB id 1214 NCTC11637 00359 SQJ03206.1	.....						347
NTDB id 1211 C694 RS00795 WP 000963128.1	.....						347
NTDB id 1334 RAOC RS04870 WP 004918236.1	.....						343
NTDB id 1013712 ABWH87 RS07325 WP 306051318.1	.....						370
NTDB id 1389 A4U84 RS07560 WP 021112712.1	.....						372
NTDB id 1130 NGFG RS03960 WP 003688695.1	.....						348
NTDB id 1124 NGFG RS03960 WP 003688695.1	.....						348
NTDB id 1123 OK783 RS03845 WP 003688695.1	.....						348
NTDB id 1427 RS RS02760 WP 011000510.1	.....						352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	.....						354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	.....						354
NTDB id 1022 ACIAD RS06390 WP 004925639.1	.....						349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	.....						349
NTDB id 1205 PSJM300 05545 AFN77183.1	.....						347
consensus							

**L** non conserved  
**E** similar  
**L** ≥ 50% conserved