

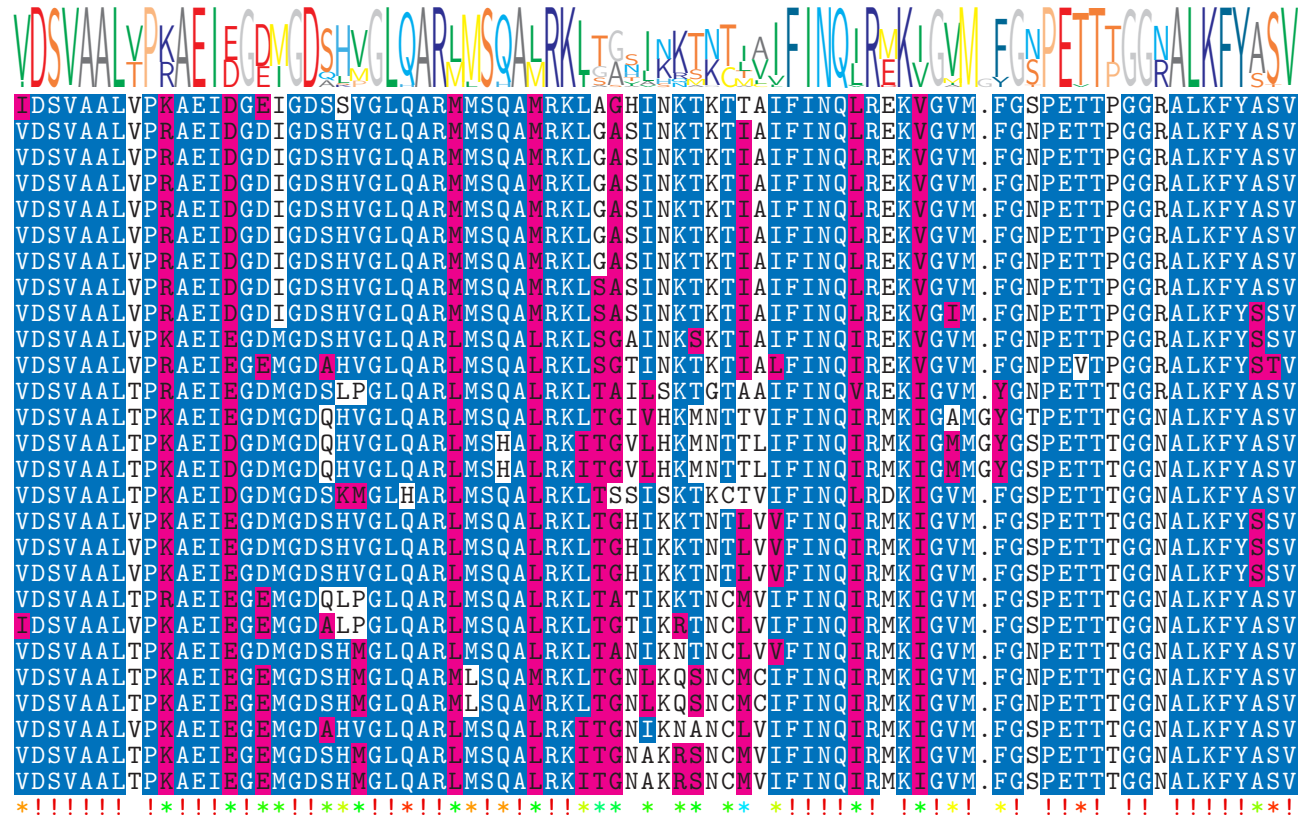
logo



NTDB id 600 KW2 RS01765 WP 011675413.1	MATKKK...TNFDDITKKYGAERDKALADALALIEKD	FGKGSIMRLGERAA.NQKVS	VSSGSLALDI	ALGAGGYPKGRIV	76
NTDB id 269 KZH43 RS08665 WP 001085462.1	.MAKKP...KKLEEISKKFGAEREKALNDALKLI	FKD FGKGSIMRLGERA.EQKVQVMSSGSLALDI	ALGSGGYPKGRIT	75	
NTDB id 228 SPD RS09265 WP 001085462.1	.MAKKP...KKLEEISKKFGAEREKALNDALKLI	FKD FGKGSIMRLGERA.EQKVQVMSSGSLALDI	ALGSGGYPKGRIT	75	
NTDB id 194 SPR RS08825 WP 001085462.1	.MAKKP...KKLEEISKKFGAEREKALNDALKLI	FKD FGKGSIMRLGERA.EQKVQVMSSGSLALDI	ALGSGGYPKGRIT	75	
NTDB id 159 SP RS09750 WP 001085462.1	.MAKKP...KKLEEISKKFGAEREKALNDALKLI	FKD FGKGSIMRLGERA.EQKVQVMSSGSLALDI	ALGSGGYPKGRIT	75	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	.MAKKP...KKLDEISKKFGAEREKALNDALKLI	FKD FGKGSIMRLGERA.EQKVQVMSSGSLALDI	ALGSGGYPKGRIT	75	
NTDB id 499 SM12261 RS08315 WP 078228268.1	.MAKKP...KKLDEISKKFGAEREKALNDALKLI	FKD FGKGSIMRLGERA.EQKVQVMSSGSLALDI	ALGSGGYPKGRIT	75	
NTDB id 453 Spy49 1753c ACI62003.1	.MAKKL...KKNEEITKKFGDERRKALDDALKN	IEKD FGKGAVMRLGERA.EQKVQVMSSGSLALDI	ALGAGGYPKGRIV	75	
NTDB id 408 SMU RS09530 WP 002262392.1	.MAKRI...KKTEEITKKFGDERRKALDDALKN	IEKD FGKGAVMRLGERA.EQKVQVMSSGSLALDI	ALGAGGYPKGRIV	75	
NTDB id 115 BSU 16940 NP 389576.2	.....MSDRQAALDMALKQIEKQFGKGSIMKLG	EKT.DTRISTVPSGSLALDI	TALGIGGYPRGRIT	60
NTDB id 625 LCA RS02525 WP 011374196.1	.....MAKDERQAALDAALKKIEKNFGKGSIMRM	GKVD.TQVSTVSSGSLALDEALGVGGYPRGRIV	62	
NTDB id 1313 DR RS12030 WP 010888966.1	.MSKD...ATKEISAPTDAKERSKATETAMSI	IEKAFGKGSIMKLGAE.SKLDVQVVSTGSLSLDL	ALGVGGIPRGRIT	74	
NTDB id 1245 Cj1673c YP 002345041.1	.....MDDNKRKSLDAALKSLDKTFGKGTILRL	GDKE.VEQIDSIGTGSVGLDL	ALGIGGVPKGRIT	61
NTDB id 1211 C694 RS00795 WP 000963128.1	.....MAIDEDKQKATISLAIKQIDKVF	FGKGAIVRLGDKQ.VEKIDSISTGSLGLDL	ALGIGGVPKGRIT	63
NTDB id 1214 NCTC11637 00359 SQJ03206.1	.....MAIDEDKQKATISLAIKQIDKVF	FGKGAIVRLGDKQ.VEKIDAISTGSLGLDL	ALGIGGVPKGRIT	63
NTDB id 1334 RAOC RS04870 WP 004918236.1MAKTETTSPNDKKKALAAVLEKLDKT	YGGKTVMKLGDGTVDHNI	IEVIPSGSLGLDL	ALGVGGYPKGRIV	70
NTDB id 1130 NGFG RS03960 WP 003688695.1	.....MSDDKSKALAAALAQIEKSF	GKGAIMKMDGSQREENLEVISTGSLGLDL	ALGVGGLPRGRIV	62
NTDB id 1124 NGFG RS03960 WP 003688695.1	.....MSDDKSKALAAALAQIEKSF	GKGAIMKMDGSQREENLEVISTGSLGLDL	ALGVGGLPRGRIV	62
NTDB id 1123 OK783 RS03845 WP 003688695.1	.....MSDDKSKALAAALAQIEKSF	GKGAIMKMDGSQREENLEVISTGSLGLDL	ALGVGGLPRGRIV	62
NTDB id 213616 A0536 RS04700 WP 012202806.1	.....MNTAVTTANS EKAKALQAALAQIEKQ	FGKGTIMRLGEGEAIQDIQVVSTGSLGLDI	ALGVGGLPRGRIV	69
NTDB id 1427 RS RS02760 WP 011000510.1	.....MEDGKKAASMSAEKQKALAAALAQIEKQ	FGKGSIMKMGDAE.VEPVQVVSTGSLGLDV	ALGVGGLPRGRIV	70
NTDB id 1389 A4U84 RS07560 WP 021112712.1	.MAENKKSNNNTVVKQVEPEQKKQALEAALAQIEKQ	FGKGSIMKLGQTE.QLDIESVSTGSLGLDL	ALGIGGLPMGRIV	78	
NTDB id 1165 A1552VC RS01565 WP 000344154.1	.....MDENKQKALAAALGQIEKQFGKGSIMRLG	DNR.AMDVETISTGSLSLDI	ALGAGGLPMGRIV	61
NTDB id 1142 GTF74 RS11550 WP 000344154.1	.....MDENKQKALAAALGQIEKQFGKGSIMRLG	DNR.AMDVETISTGSLSLDI	ALGAGGLPMGRIV	61
NTDB id 1205 PSJM300 05545 AFN77183.1MDENKQRALAAALGQIEKQFGKGAVMR	MGDHD.RQAIPSI	STGSLGLDI	ALGIGGLPKGRIV	61
NTDB id 1022 ACIAD RS06390 WP 004925639.1	.....MDDNKSKALQAALSQIEKQFGKNTVMRLG	DNT.VQAVEAVSTGSLTLDI	ALGIGGLPKGRIV	61
NTDB id 1074 ABD1 RS10195 WP 000344167.1	.....MDENKSKALQAALSQIEKQFGKNTVMRLG	DNT.VQAVEAVSTGSLTLDI	ALGIGGLPKGRIV	61
consensus	*** **	*** **	*** **	*** **	*** **

logo

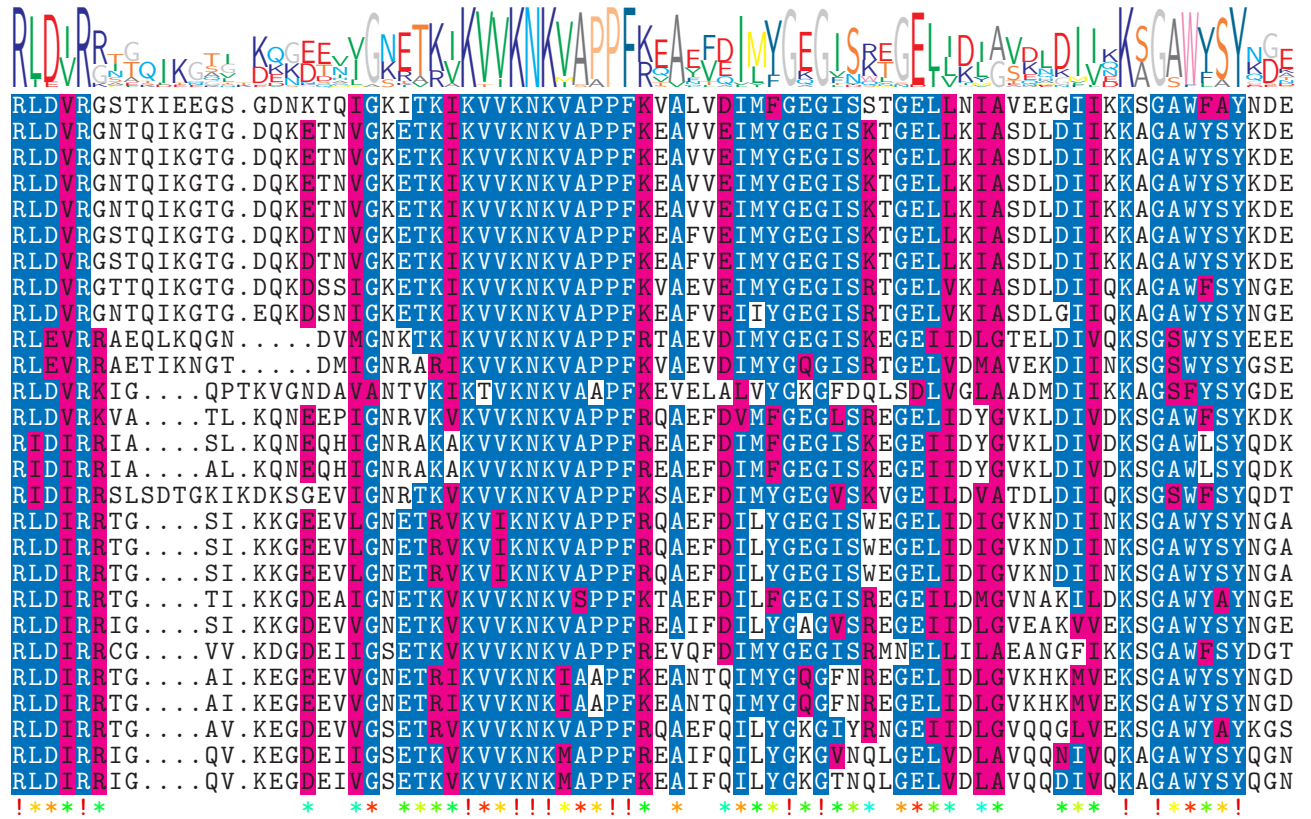
NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 453 Spy49 1753c 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 1211 C694 RS00795 WP 000963128.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
NTDB id 1334 RAOC RS04870 WP 004918236.1
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 213616 A0536 RS04700 WP 012202806.1
NTDB id 1427 RS RS02760 WP 011000510.1
NTDB id 1389 A4U84 RS07560 WP 021112712.1
NTDB id 1165 A1552VC RS01565 WP 000344154.1
NTDB id 1142 GTF74 RS11550 WP 000344154.1
NTDB id 1205 PSJM300 05545 AFN77183.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus



235
234
234
234
234
234
234
234
234
234
221
233
221
223
223
229
221
221
221
228
229
220
221
220
220
220
220

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 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 1211 C694 RS00795 WP 000963128.1
 NTDB id 1214 NCTC11637 00359 SQJ03206.1
 NTDB id 1334 RAOC RS04870 WP 004918236.1
 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 213616 A0536 RS04700 WP 012202806.1
 NTDB id 1427 RS RS02760 WP 011000510.1
 NTDB id 1389 A4U84 RS07560 WP 021112712.1
 NTDB id 1165 A1552VC RS01565 WP 000344154.1
 NTDB id 1142 GTF74 RS11550 WP 000344154.1
 NTDB id 1205 PSJM300 05545 AFN77183.1
 NTDB id 1022 ACIAD RS06390 WP 004925639.1
 NTDB id 1074 ABD1 RS10195 WP 000344167.1
 consensus



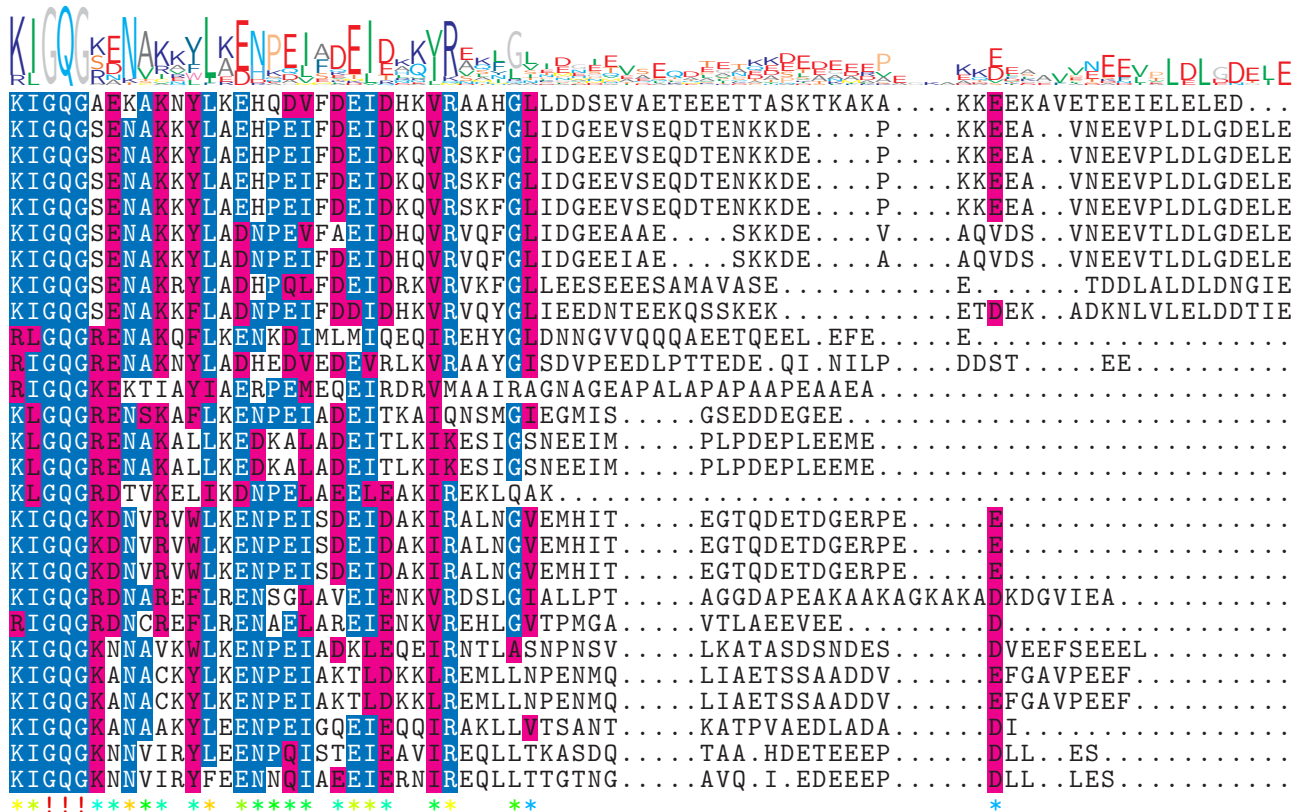
314
313
313
313
313
313
313
313
313
313
294
296
309
296
298
298
309
296
296
296
303
304
312
295
295
295
295
295

!***!* * ** *****!*****! * * *****!*!*** ***** ** *** ! !*****!

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 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 1211 C694 RS00795 WP 000963128.1
 NTDB id 1214 NCTC11637 00359 SQJ03206.1
 NTDB id 1334 RAOC RS04870 WP 004918236.1
 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 213616 A0536 RS04700 WP 012202806.1
 NTDB id 1427 RS RS02760 WP 011000510.1
 NTDB id 1389 A4U84 RS07560 WP 021112712.1
 NTDB id 1165 A1552VC RS01565 WP 000344154.1
 NTDB id 1142 GTF74 RS11550 WP 000344154.1
 NTDB id 1205 PSJM300 05545 AFN77183.1
 NTDB id 1022 ACIAD RS06390 WP 004925639.1
 NTDB id 1074 ABD1 RS10195 WP 000344167.1

consensus



387
383
383
383
383
379
379
375
380
348
355
363
343
347
347
343
348
348
348
367
352
372
354
354
347
349
349

logo

		IEIEE	
NTDB id 600	KW2 RS01765 WP 011675413.1	.....	387
NTDB id 269	KZH43 RS08665 WP 001085462.1	IEIEE	388
NTDB id 228	SPD RS09265 WP 001085462.1	IEIEE	388
NTDB id 194	SPR RS08825 WP 001085462.1	IEIEE	388
NTDB id 159	SP RS09750 WP 001085462.1	IEIEE	388
NTDB id 527	SMSK321 RS11065 WP 001085454.1	IEIEE	384
NTDB id 499	SM12261 RS08315 WP 078228268.1	IEIEE	384
NTDB id 453	Spy49 1753c ACI62003.1	IED..	378
NTDB id 408	SMU RS09530 WP 002262392.1	LED..	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
NTDB id 1245	Cj1673c YP 002345041.1	.....	343
NTDB id 1211	C694 RS00795 WP 000963128.1	.....	347
NTDB id 1214	NCTC11637 00359 SQJ03206.1	.....	347
NTDB id 1334	RAOC RS04870 WP 004918236.1	.....	343
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 213616	A0536 RS04700 WP 012202806.1	.....	367
NTDB id 1427	RS RS02760 WP 011000510.1	.....	352
NTDB id 1389	A4U84 RS07560 WP 021112712.1	.....	372
NTDB id 1165	A1552VC RS01565 WP 000344154.1	.....	354
NTDB id 1142	GTF74 RS11550 WP 000344154.1	.....	354
NTDB id 1205	PSJM300 05545 AFN77183.1	.....	347
NTDB id 1022	ACIAD RS06390 WP 004925639.1	.....	349
NTDB id 1074	ABD1 RS10195 WP 000344167.1	.....	349

consensus

non conserved
 similar
 ≥ 50% conserved