

NTDB id 1028 TT RS08215 WP 011173991.1	MSVLTTIGDKRLGAALLDAGLLTDEELQRALERHREVGGSLAEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPVKV	80
NTDB id 1306 DR RS10060 WP 027479822.1	.MALSIGDRRLGAILLDQGYLGNDLQRALERHSEVGGRLADVLIDSGMVGEKRIARAIEEALGIPLVNLLAVQPDPAAL	79
NTDB id 1110 NGFG RS09235 WP 003689817.1	.....	0
NTDB id 1168 A1552VC RS11070 WP 000957200.1	.....	0
NTDB id 1293 VP RS12240 WP 005479695.1	.....	0
NTDB id 1401 DSB67 RS12665 WP 010643259.1	.....	0
NTDB id 1251 GC085 RS07725 WP 011946523.1	.....	0
NTDB id 997964 ABFB52 RS24905 WP 085747736.1	.....	0
NTDB id 1058 ABD1 RS01615 WP 001274986.1	.....	0
NTDB id 1018 ACIAD RS01685 WP 004920473.1	.....	0
consensus		

NTDB id 1028 TT RS08215 WP 011173991.1	ALLPAEKAKELKAIPFALDEEAGVVRVAFLNPLDTLSEEEVDTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPP..P	158
NTDB id 1306 DR RS10060 WP 027479822.1	RSIRPQTALNLQAFPFALE..GDRLRVALVDPLSSFSIETLEDDSGFDIEPYQALREEVMWAIATHYPELGLEIVVPSGA	157
NTDB id 1110 NGFG RS09235 WP 003689817.1	.....	0
NTDB id 1168 A1552VC RS11070 WP 000957200.1	.....	0
NTDB id 1293 VP RS12240 WP 005479695.1	.....	0
NTDB id 1401 DSB67 RS12665 WP 010643259.1	.....	0
NTDB id 1251 GC085 RS07725 WP 011946523.1	.....	0
NTDB id 997964 ABFB52 RS24905 WP 085747736.1	.....	0
NTDB id 1058 ABD1 RS01615 WP 001274986.1	.....	0
NTDB id 1018 ACIAD RS01685 WP 004920473.1	.....	0
consensus		

NTDB id 1028	TT RS08215 WP 011173991.1	SGEGQKDKLKLGLLELLQKGWISREALEEALVEQEKTGDLLGRILV.RKGLPEEALYRALAEQKGLFLESTEGIVPDPSAA	237
NTDB id 1306	DR RS10060 WP 027479822.1	SDAGRTGGKLGRLITHGYITDAQLQVALDAQQTGEALGATLISQRAITEDQLYEVLAEQEGTTFLPNPSGFHPGEEVL	237
NTDB id 1110	NGFG RS09235 WP 003689817.1	.....	0
NTDB id 1168	A1552VC RS11070 WP 000957200.1	.....	0
NTDB id 1293	VP RS12240 WP 005479695.1	.....	0
NTDB id 1401	DSB67 RS12665 WP 010643259.1	.....	0
NTDB id 1251	GCO85 RS07725 WP 011946523.1	.....	0
NTDB id 997964	ABFB52 RS24905 WP 085747736.1	.....	0
NTDB id 1058	ABD1 RS01615 WP 001274986.1	.....	0
NTDB id 1018	ACIAD RS01685 WP 004920473.1	.....	0
consensus			

NTDB id 1028 TT RS08215 WP 011173991.1	LLLLRSDALRYGAVPIGFQNGEVEVVLSDPRHKEAVAQLLNRPARFYALALPQAWHEELFRRAYPQKNRLGEVLVQEGKLSR	317
NTDB id 1306 DR RS10060 WP 027479822.1	GSMLRADALRLLAVPVDETEQGVTVLTS DPRKRDPIDALIGRPVQLMLTRPRDIERLIEQFYPPQRGRLGEQLVQEGTLSR	317
NTDB id 1110 NGFG RS09235 WP 003689817.1	.....	0
NTDB id 1168 A1552VC RS11070 WP 000957200.1	.....	0
NTDB id 1293 VP RS12240 WP 005479695.1	.....	0
NTDB id 1401 DSB67 RS12665 WP 010643259.1	.....	0
NTDB id 1251 GC085 RS07725 WP 011946523.1	.....	0
NTDB id 997964 ABFB52 RS24905 WP 085747736.1	.....	0
NTDB id 1058 ABD1 RS01615 WP 001274986.1	.....	0
NTDB id 1018 ACIAD RS01685 WP 004920473.1	.....	0
consensus		

NTDB id	1028	TT	RS08215	WP	011173991.1	EALKEA	L	V	Q	K	G	L	P	R	A	K	P	L	G	E	I	L	V	E	L	G	L	A	R	P	E	D	V	E	E	A	L	Q	K	Q	R	G	G	R	L	E	D	T	L	V	Q	S	G	K	L	R	P	E	A	L	A	Q	A	V	A	T	Q	L	G	Y	P	Y	D	P	E		397			
NTDB id	1306	DR	RS10060	WP	027479822.1	DQLREA	L	V	Q	V	A	R	E	G	K	V	K	P	L	G	E	V	I	T	E	L	G	F	A	S	P	D	E	V	D	S	A	L	Q	K	N	V	G	G	R	L	E	D	T	L	V	Q	S	G	K	L	S	P	E	M	L	A	R	S	L	A	A	Q	L	G	Y	E	F	L	D	P	I	Q		397
NTDB id	1110	NGFG	RS09235	WP	003689817.1		M	S	V	G	L	L	R	I	L	V	Q	N	Q	V	V	T	E	Q	A	E	H	Y	N	E	S	Q	.	A	G	K	E	V	L	P	M	L	F	S	D	G	V	I	S	P	K	S	L	A	L	I	A	R	V	F	S	Y	S	I	L	D	L	R	H		65									
NTDB id	1168	A1552VC	RS11070	WP	000957200.1		M	L	T	N	L	V	A	L	I	R	Q	A	E	L	S	A	T	Q	E	Q	A	V	T	Q	S	A	S	T	G	S	V	P	E	A	L	L	E	S	I	F	H	A	E	L	T	E	Q	L	S	H	I	F	L	P	E	T	D	L	S	R		66												
NTDB id	1293	VP	RS12240	WP	005479695.1		M	H	S	N	L	S	T	I	L	R	Q	K	G	L	T	F	S	Q	E	S	L	I	E	Q	V	K	A	S	G	I	S	M	P	E	A	L	S	S	G	F	F	T	S	S	E	L	A	E	H	L	S	S	I	F	G	L	S	P	E	Q		66												
NTDB id	1401	DSB67	RS12665	WP	010643259.1		M	L	T	N	L	S	T	V	L	R	Q	A	G	I	L	T	F	S	Q	E	S	L	I	E	Q	V	K	A	S	G	I	S	M	P	E	A	L	S	S	G	F	F	Q	S	H	E	L	T	E	H	L	S	S	V	F	G	L	S	C	T	S	L	N	Q		66								
NTDB id	1251	GC085	RS07725	WP	011946523.1		M	A	L	A	T	E	E	Y	R	L	Q	G	I	G	Q	L	L	V	L	E	K	L	D	K	T	K	A	I	E	L	H	K	L	A	A	E	K	I	S	L	L	Q	Y	I	V	K	N	K	I	L	S	A	E	Q	I	A	L	T	A	A	Q	N	F	G	V	P	M	L	D	I	N	C		74
NTDB id	997964	ABFB52	RS24905	WP	085747736.1		M	N	D	I	A	L	S	G	I	A	K	Q	L	V	Q	A	E	L	L	T	E	K	S	A	Q	Q	A	W	Q	Q	A	Q	R	N	R	L	S	L	V	S	Y	L	V	Q	N	K	L	V	K	S	W	Q	V	A	E	I	A	S	E	H	F	G	M	A	F	L	D	L	N	C		70		
NTDB id	1058	ABD1	RS01615	WP	001274986.1		M	S	A	L	H	T	S	P	K	F	T	G	F	R	R	L	V	E	E	K	H	V	S	A	A	T	M	Q	T	A	L	D	A	A	K	R	A	K	Q	D	T	V	A	Y	L	I	E	E	V	H	L	S	P	S	L	A	E	T	I	S	A	E	F	A	E	P	Y	F	D	L	D	V		74
NTDB id	1018	ACIAD	RS01685	WP	004920473.1		M	S	A	F	T	T	P	P	K	F	S	G	F	I	R	L	V	E	E	G	Y	V	N	A	Q	N	M	M	Q	A	L	E	K	A	K	F	K	Q	D	I	V	P	Y	L	I	D</																												

NTDB id	1028	TT	RS08215	WP	O11173991.1	DPPDPGAPL	L	PED	L	CRRYGV	V	FPHRLEGN	R	L	VLLMKDPRN	I	L	A	DDVRL	A	L	KRKGLNYE	V	A	P	A	V	A	T	E	A	A	I	T	K	L	I	E	R	F	Y	G	K		477																																				
NTDB id	1306	DR	RS10060	WP	O27479822.1	NPPDPKVAL	M	IPEA	T	A	R	R	V	V	V	P	V	R	L	Q	G	S	L	V	V	A	M	K	D	P	R	N	V	F	A	L	D	D	L	K	L	I	T	G	.	.	.	.	.	K	E	I	L	P	A	V	M	A	E	K	D	I	I	R	L	I	E	R	Y	F	G	E		472							
NTDB id	1110	NGFG	RS09235	WP	O03689817.1	YPRHRV	L	M	G	V	L	T	E	E	Q	M	V	E	F	H	C	V	P	V	F	R	G	D	K	V	F	F	A	V	S	D	P	T	Q	M	P	Q	I	Q	K	T	V	S	A	A	G	.	.	.	.	.	I	A	V	E	L	V	I	V	E	D	D	Q	L	A	G	L	D	V	G	S	R		140		
NTDB id	1168	A1552VC	RS11070	WP	O00957200.1	YDYANLC	Q	Q	L	G	L	E	L	I	T	R	Y	D	A	L	P	I	A	K	Q	L	L	L	L	A	V	S	D	P	T	L	L	Q	A	E	E	E	F	R	F	A	T	G	.	.	.	.	.	L	Q	V	E	L	A	D	H	R	A	L	Q	A	I	R	R	L	Y	G	R		141						
NTDB id	1293	VP	RS12240	WP	O05479695.1	YEYASLC	Q	Q	L	G	L	E	L	I	T	R	H	N	A	L	P	L	H	R	T	P	S	T	L	L	L	A	V	A	D	P	T	N	Q	A	E	D	D	F	R	F	A	T	G	.	.	.	.	.	L	Q	V	E	L	V	L	A	D	F	R	E	L	S	T	A	I	R	R	L	Y	G	R		141		
NTDB id	1401	DSB67	RS12665	WP	O10643259.1	YEYASLC	Q	T	L	G	L	R	D	L	I	T	R	H	N	A	L	P	L	N	R	T	S	S	T	L	I	L	A	V	A	D	P	T	N	Q	A	E	D	D	F	R	F	A	T	G	.	.	.	.	.	L	Q	V	E	L	V	L	A	D	F	R	E	L	T	A	A	I	R	R	L	Y	G	R		141	
NTDB id	1251	GC085	RS07725	WP	O11946523.1	IDVGTI	P	V	N	L	V	N	E	K	L	I	K	R	H	A	M	V	P	L	F	S	R	G	T	N	L	Y	L	A	T	D	P	S	K	Q	A	S	L	K	E	I	Q	F	H	T	G	.	.	.	.	.	L	N	T	H	A	I	V	E	T	D	K	L	S	A	L	I	D	N	L	L	T	A		149	
NTDB id	997964	ABFB52	RS24905	WP	O85747736.1	LDKETQ	P	K	G	L	V	S	E	K	L	V	R	Q	H	H	A	L	P	L	W	R	G	N	K	L	F	V	G	I	S	D	P	S	N	H	Q	A	I	N	D	I	Q	F	S	T	G	.	.	.	.	.	L	S	T	E	A	I	L	V	E	D	D	K	L	T	D	A	I	E	K	F	F	D	T		145
NTDB id	1058	ABD1	RS01615	WP	O01274986.1	YDTSQI	P	K	D	L	V	D	Q	K	L	I	L	K	H	R	I	L	P	L	I	Q	R	G	Q	I	L	V	A	T	S	N	P	S	N	T	E	A	I	D	A	I	R	F	N	S	K	.	.	.	.	.	L	L	V	E	P	V	I	V	E	H	H	K	L	E	K	V	L	G	Q	H	F	A	E		149
NTDB id	1018	ACIAD	RS01685	WP	O04920473.1	EDPALFL	K	D	K	I	D	E	K	L	I	Q	K	Y	R	I	M	P	L	V	H	R	G	H	V	L	V	A	T	S	N	P	T	N	I	E	A	M	D	A	I	R	F	N	S	K	.	.	.	.	.	L																									

```

NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1306 DR RS10060 WP 027479822.1
NTDB id 1110 NNGF RS09235 WP 003689817.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1251 GCO85 RS07725 WP 011946523.1
NTDB id 997964 ABFB52 RS24905 WP 085747736.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

```



```

NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1306 DR RS10060 WP 027479822.1
NTDB id 1110 NGFG RS09235 WP 003689817.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 997964 ABFB52 RS24905 WP 085747736.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

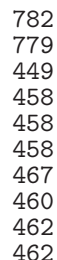
```



```

NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1306 DR RS10060 WP 027479822.1
NTDB id 1110 NGFG RS09235 WP 003689817.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 997964 ABFB52 RS24905 WP 085747736.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

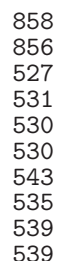
```



```

NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1306 DR RS10060 WP 027479822.1
NTDB id 1110 NGFG RS09235 WP 003689817.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1293 VP RS12240 WP 005479695.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 997964 ABFB52 RS24905 WP 085747736.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

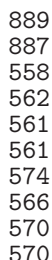
```



```

NTDB id 1028 TT RS08215 WP 011173991.1
NTDB id 1306 DR RS10060 WP 027479822.1
NTDB id 1110 NGFG RS09235 WP 003689817.1
NTDB id 1168 A1552VC RS11070 WP 000957200.1
NTDB id 1293 VP RS12240 WP 005476695.1
NTDB id 1401 DSB67 RS12665 WP 010643259.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 997964 ABFB52 RS24905 WP 085747736.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

```



-  non conserved
-  similar
-  >50% conserved