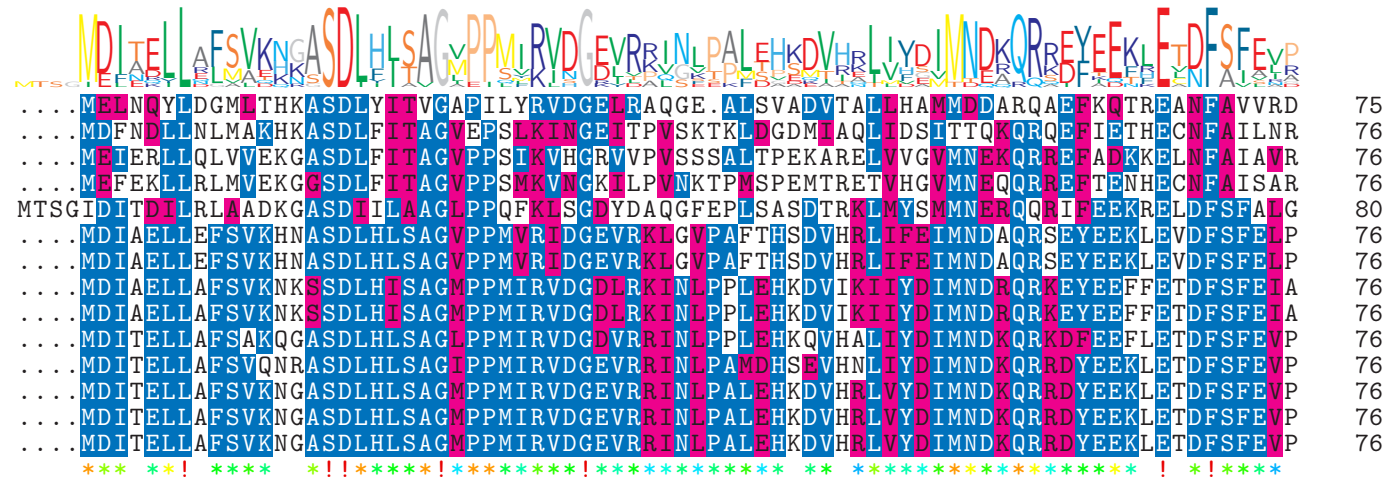


```

NTDB id 1177 A1552VC RS01165 WP 000422572.1
NTDB id 1019 ACIAD RS04205 WP 004922051.1
NTDB id 997780 ABDK11 RS01045 WP 346838470.1
NTDB id 1203 PSJM300 01605 AFN76401.1
NTDB id 1307 DR RS10055 WP 010888596.1
NTDB id 1185 GTF74 RS11940 WP 000350195.1
NTDB id 1176 A1552VC RS01160 WP 000350195.1
NTDB id 1283 ACE17W RS02630 WP 010947729.1
NTDB id 1259 GC085 RS10305 WP 010947729.1
NTDB id 1194 PAKAF RS01995 WP 003084552.1
NTDB id 1020 ACIAD RS04210 WP 011182164.1
NTDB id 1081 FDQ49 RS05335 WP 006581387.1
NTDB id 1060 ABD1 RS04380 WP 000355489.1
NTDB id 1040 HON27 RS13360 WP 000355489.1
consensus

```



```

NTDB id 1177 A1552VC RS01165 WP 000422572.1
NTDB id 1019 ACIAD RS04205 WP 004922051.1
NTDB id 997780 ABDK11 RS01045 WP 346838470.1
NTDB id 1203 PSJM300 01605 AFN76401.1
NTDB id 1307 DR RS10055 WP 010888596.1
NTDB id 1185 GTF74 RS11940 WP 000350195.1
NTDB id 1176 A1552VC RS01160 WP 000350195.1
NTDB id 1283 ACE17W RS02630 WP 010947729.1
NTDB id 1259 GC085 RS10305 WP 010947729.1
NTDB id 1194 PAKAF RS01995 WP 003084552.1
NTDB id 1020 ACIAD RS04210 WP 011182164.1
NTDB id 1081 FDQ49 RS05335 WP 006581387.1
NTDB id 1060 ABD1 RS04380 WP 000355489.1
NTDB id 1040 HON27 RS13360 WP 000355489.1
consensus

```



```

NTDB id 1177 A1552VC RS01165 WP 000422572.1
NTDB id 1019 ACIAD RS04205 WP 004922051.1
NTDB id 997780 ABDK11 RS01045 WP 346838470.1
NTDB id 1203 PSJM300 01605 AFN76401.1
NTDB id 1307 DR RS10055 WP 010888596.1
NTDB id 1185 GTF74 RS11940 WP 000350195.1
NTDB id 1176 A1552VC RS01160 WP 000350195.1
NTDB id 1283 ACE17W RS02630 WP 010947729.1
NTDB id 1259 GC085 RS10305 WP 010947729.1
NTDB id 1194 PAKAF RS01995 WP 003084552.1
NTDB id 1020 ACIAD RS04210 WP 011182164.1
NTDB id 1081 FDQ49 RS05335 WP 006581387.1
NTDB id 1060 ABD1 RS04380 WP 000355489.1
NTDB id 1040 HON27 RS13360 WP 000355489.1
consensus

```



NTDB	id	1177	A1552VC	RS01165	WP	000422572.1	A	L	E	R	I	L	H	I	V	P	K	E	Q	R	E	Q	F	L	L	D	L	S	L	N	L	K	G	V	I	A	Q	Q	L	R	D	K	N	G	K	G	R	H	C	V	F	E	V	L	L	N	S	P	R	I	A	D	L	I	R	R	G	E	L	H	E	L	K	A	T	M	A	R	S	Q	E	V	G	M	Q	313
NTDB	id	1019	ACIAD	RS04205	WP	004922051.1	T	L	E	R	I	I	H	F	F	D	A	D	R	H	Q	Q	T	F	M	D	L	S	L	N	L	K	A	V	I	S	Q	Q	L	I	P	T	H	D	G	Q	S	R	R	A	A	V	E	V	L	I	N	T	P	L	S	D	Y	I	R	Q	G	E	I	Y	K	I	K	E	L	M	A	R	S	G	E	L	G	M	Q	316
NTDB	id	997780	ABDK11	RS01045	WP	346838470.1	A	L	D	R	I	I	H	F	F	A	D	R	H	E	Q	L	W	M	D	L	S	L	N	L	K	A	M	V	A	Q	Q	L	V	P	T	D	G	G	R	R	A	C	L	E	I	M	I	N	T	P	L	S	D	L	I	R	K	G	E	V	H	K	M	K	E	L	M	T	R	S	V	E	Q	G	M	Q	315			
NTDB	id	1203	PSJM300	16005	AFN	76401.1	A	L	D	R	I	I	H	F	F	A	D	R	H	E	Q	L	W	M	D	L	S	L	N	L	K	A	I	V	A	Q	Q	L	V	P	T	P	D	G	K	R	R	A	V	E	V	L	I	N	T	P	L	S	D	L	I	R	K	G	E	V	H	K	L	G	L	M	K	R	S	T	D	L	G	M	Q	315				
NTDB	id	1307	DR	RS10055	WP	010888596.1	S	I	D	R	I	V	D	V	F	P	E	E	Q	E	Q	I	R	V	Q	L	A	N	N	L	V	A	V	M	T	Q	Q	L	L	P	R	A	D	G	Q	G	R	V	L	A	Y	E	I	L	A	N	P	A	V	R	A	L	I	R	E	G	K	T	F	Q	I	T	S	V	M	Q	T	G	A	R	E	G	M	V	319	
NTDB	id	1185	GTF74	RS11940	WP	000350195.1	T	I	D	R	I	I	D	V	F	P	G	S	D	K	D	M	V	R	S	M	L	S	E	S	L	R	A	V	I	A	Q	K	L	L	K	R	.	V	G	G	R	V	A	C	H	E	I	M	L	A	T	P	A	I	R	N	L	I	R	E	D	K	V	A	Q	M	Y	S	I	I	Q	T	G	A	A	H	G	M	Q	314
NTDB	id	1176	A1552VC	RS01160	WP	000350195.1	T	I	D	R	I	I	D	V	F	P	G	S	D	K	D	M	V	R	S	M	L	S	E	S	L	R	A	V	I	A	Q	K	L	L	K	R	.	V	G	G	R	V	A	C	H	E	I	M	L	A	T	P	A	I	R	N	L	I	R	E	D	K	V	A	Q	M	Y	S	I	I	Q	T	G	A	A	H	G	M	Q	314
NTDB	id	1283	ACE17W	RS02630	WP	010947729.1	T	I	N	R	I	I	D	V	F	P	A	E	E	K	S	M	V	R	S	M	L	S	E	S	L	Q	A	V	V	A	Q	S	L	L	K	R	.	N	G	G	R	V	A	A	E	I	E	M	M	C	T	G	A	I	R	N	L	I	R	E	D	K	I	A	Q	M	Y	S	I	I	Q	T	G	Q	A	K	G	M	Q	314
NTDB	id	1259	GCO85	RS10305	WP	010947729.1	T	I	N	R	I	I	D	V	F	P	A	E	E	K	S	M	V	R	S	M	L	S	E	S	L	Q	A	V	V	A	Q	S	L	L	K	R	.	N	G	G	R	V	A	A	E	I	E																																	

NTDB id	1177	A1552VC	RS01165	WP	000422572.1	TFDQALYQLVVDKTISEQDALHSA	DSANDLRMLKTKRGDDYGSGSL.....QNVKI..DME.....	368
NTDB id	1019	ACIAD	RS04205	WP	004922051.1	TFDQALFDLYDHQHISYADALKHA	DSPNNRLRLQIKLSEEANKPLDNRRMSEMERKMTF...DGQ...RRN.....LK..	383
NTDB id	997780	ABDK11	RS01045	WP	346838470.1	TFDQALYELYDRGEITYEDALAHA	DSANDLRLLLIKLGSEADAEYLN....EAAGGLSL..QGDD...SEGDDGGPPLY..	383
NTDB id	1203	PSJM300	01605	AFN	76401.1	TFDQALYNLYVVGGEITYEDALLHA	DSSNDLRLLMIKLGETSDGEHLT....SVSQGLTL..EMS...DDDPG..RSFR..	381
NTDB id	1307	DR	RS10055	WP	010888596.1	TMDAYLAGLFRRHLITIDYKGLERA	IDP..KE..FARLANDASAGLGGMTPAAPPVPAYNSASSSSTGRGGDFGRGA AAP	396
NTDB id	1185	GTF74	RS11940	WP	000350195.1	TMEQNAKQLIARGVVDAQEVQSKI	ELDKA..F.....	345
NTDB id	1176	A1552VC	RS01160	WP	000350195.1	TMEQNAKQLIARGVVDAQEVQSKI	ELDKA..F.....	345
NTDB id	1283	ACE17W	RS02630	WP	010947729.1	TLDQHLTELVNKNIIISKHTAHEAA	LNK..SL..F.....	344
NTDB id	1259	GCO85	RS10305	WP	010947729.1	TLDQHLTELVNKNIIISKHTAHEAA	LNK..SL..F.....	344
NTDB id	1194	PAKAF	RS01995	WP	003084552.1	TLDMCLKGLVAKGLISRREAREKA	KIP..EN..F.....	344
NTDB id	1020	ACIAD	RS04210	WP	011182164.1	TLDQSLKQLLAKGIINLP TARAVAK	SPE..ES..F.....	344
NTDB id	1081	FDQ49	RS05335	WP	006581387.1	TLDQSLKGLVSRGVISPQTARTAA	KQP..ES..FL.....	345
NTDB id	1060	ABD1	RS04380	WP	000355489.1	TLDQSLKGLVARGVISPQTARTAA	KQP..ES..FL.....	345
NTDB id	1040	HON27	RS13360	WP	000355489.1	TLDQSLKGLVARGVISPQTARTAA	KQP..ES..FL.....	345
consensus						!*** * !* **** *	* *	

NTDB	id	1177	A1552VC	RS01165	WP	000422572.1	.....	368
NTDB	id	1019	ACIAD	RS04205	WP	004922051.1	.....	383
NTDB	id	997780	ABDK11	RS01045	WP	346838470.1	.....	383
NTDB	id	1203	PSJM300	01605	AFN	76401.1	.....	381
NTDB	id	1307	DR	RS10055	WP	010888596.1	ATPAAPAAGRSEPGRAGGFRR	418
NTDB	id	1185	GTF74	RS11940	WP	000350195.1	.....	345
NTDB	id	1176	A1552VC	RS01160	WP	000350195.1	.....	345
NTDB	id	1283	ACE17W	RS02630	WP	010947729.1	.....	344
NTDB	id	1259	GCO85	RS10305	WP	010947729.1	.....	344
NTDB	id	1194	PAKAF	RS01995	WP	003084552.1	.....	344
NTDB	id	1020	ACIAD	RS04210	WP	011182164.1	.....	344
NTDB	id	1081	FDQ49	RS05335	WP	006581387.1	.....	345
NTDB	id	1060	ABD1	RS04380	WP	000355489.1	.....	345
NTDB	id	1040	HON27	RS13360	WP	000355489.1	.....	345
consensus								

 non conserved
 similar
 $\geq 50\%$ conserved