

logo

NTDB id 1410 SGL RS13950 WP 010873519.1	MSVLTIGDKRLGAALLDAGLLTDEELQRALERHREVGGSLAEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPKVK	0
NTDB id 1028 TT RS08215 WP 011173991.1	MSVLTIGDKRLGAALLDAGLLTDEELQRALERHREVGGSLAEVLVDMGLLSERRIAQTIEDRFGIPLVELHRVEIPPKVK	80
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 1110 NGFG RS09235 WP 003689817.1	.....	0
NTDB id 1251 GCO85 RS07725 WP 011946523.1	.....	0
NTDB id 30146 ABAYE RS17130 WP 001274987.1	.....	0
NTDB id 1058 ABD1 RS01615 WP 001274986.1	.....	0
NTDB id 1018 ACIAD RS01685 WP 004920473.1	.....	0
consensus		

logo

NTDB id 1410 SGL RS13950 WP 010873519.1	ALLPAEKAKELKAIPFALDEEAGVVRVAFLNPLDTLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPPPSG	0
NTDB id 1028 TT RS08215 WP 011173991.1	ALLPAEKAKELKAIPFALDEEAGVVRVAFLNPLDTLSLEEVEDLTGLVVEPYQTTKSAFLYALAKHYPELGLPVPPPPSG	160
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 1110 NGFG RS09235 WP 003689817.1	.....	0
NTDB id 1251 GCO85 RS07725 WP 011946523.1	.....	0
NTDB id 30146 ABAYE RS17130 WP 001274987.1	.....	0
NTDB id 1058 ABD1 RS01615 WP 001274986.1	.....	0
NTDB id 1018 ACIAD RS01685 WP 004920473.1	.....	0
consensus		

logo

NTDB id 1410 SGL RS13950 WP 010873519.1	EGQKDLKLGELLQKGWISREALEEALVEQEKTDGDLGRILVRKGLPEEALYRALAEQKGLEFLESTEGIVDPDPSAALLL	0
NTDB id 1028 TT RS08215 WP 011173991.1	EGQKDLKLGELLQKGWISREALEEALVEQEKTDGDLGRILVRKGLPEEALYRALAEQKGLEFLESTEGIVDPDPSAALLL	240
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 1110 NGFG RS09235 WP 003689817.1	.....	0
NTDB id 1251 GCO85 RS07725 WP 011946523.1	.....	0
NTDB id 30146 ABAYE RS17130 WP 001274987.1	.....	0
NTDB id 1058 ABD1 RS01615 WP 001274986.1	.....	0
NTDB id 1018 ACIAD RS01685 WP 004920473.1	.....	0
consensus		

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1028 TT RS08215 WP 011173991.1
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 1110 NGFG RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 30146 ABAYE RS17130 WP 001274987.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

[illegible]

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1028 TT RS08215 WP 011173991.1
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 1110 NSGF RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 30146 ABAYE RS17130 WP 001274987.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

[illegible]

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1028 TT RS08215 WP 011173991.1
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 1110 NGBF RS09235 WP 003689817.1
NTDB id 1251 GCO85 RS07725 WP 011946523.1
NTDB id 30146 ABAYE RS17130 WP 001274987.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

A sequence logo visualization at the top of the alignment, where the height of each letter indicates its relative frequency or conservation at that position. The letters are color-coded: blue for hydrophobic, red for acidic/basic, green for polar, and yellow for small/neutral.

Sequence	Position
SVDPEVAPILATQMAELIGRFFPLDTCRRFKFLPLAQEGDPSSVLVAVMDPDNLAQDEINRILRVKGF..EIRRLVVT	164
VYDPEEDPPD.....GAPLLPEDLCRRYGFPHRLE...GNRLVLLMKDPNRNILADVVRLALKRGGLNYEVAPAVAT	463
ETDLSRDYDIAN.....CQQQLGLRELITRYDALPIAKQ....GNLLLLAVSDPTLLQAEEEFRAFATG.....LQVELALAD	127
QPELSQYEYAS.....LCQQQLGLRELITRHNALPLHRT...PSTLLLAVADPTNQQAEDDFRAFATG.....LQVELVLAD	127
CTSLNQYEYAS.....CQTLLGLRDLTRHNALPLNRT...SSTLLILAVADPTNLQAEDDFRAFATG.....LQVELVLAD	127
IIDLHYPRHR.....VLMGVLTTEQMVEFHCVPVFRR...GDKVFFAVSDPTQMPQIKTQVSAAQ.....IAVELVIVE	126
MIDINCIDVGT.....IPVNLYNEKLIKRHAMVPLFSR...GTNLYLATDDPSKKQASKEIQHTG.....LNTHAIVVE	135
YFDLDVYDTSQ.....IPKDLVDQKLLILKHRIPLLIQR...GQILYVATSNPSNTIEAIDAIRFNASK.....LLVEPVIVE	135
YFDLDVYDTSQ.....IPKDLVDQKLLILKHRIPLLIQR...GQILYVATSNPSNTIEAIDAIRFNASK.....LLVEPVIVE	135
LIDLGVFDPAL.....FLDKKIDEKLIKQYRIMPLVHR...GHVLYVATSNPTNTEAMDIAIRFNASK.....LKVEPTIVE	135

* * * * *

logo

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1028 TT RS08215 WP 011173991.1
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 1110 NGBF RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 30146 ABAYE RS17130 WP 001274987.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

[illegible]

logo

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1028 TT RS08215 WP 011173991.1
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 1110 NGBF RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 30146 ABAYE RS17130 WP 001274987.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

                               	                               	                               	                               	       
--	---	---	---	---

logo

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1028 TT RS08215 WP 011173991.1
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 1110 NGBF RS09235 WP 003689817.1
NTDB id 1251 GCO85 RS07725 WP 011946523.1
NTDB id 30146 ABAYE RS17130 WP 001274987.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus

[illegible]

logo

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1028 TT RS08215 WP 011173991.1
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 1110 NGFG RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 30146 ABAYE RS17130 WP 001274987.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus



482
755
431
431
431
422
440
435
435
435

logo

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1028 TT RS08215 WP 011173991.1
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 1110 NGFG RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 30146 ABAYE RS17130 WP 001274987.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus



561
819
493
492
492
488
505
501
501
501

logo

NTDB id 1410 SGL RS13950 WP 010873519.1
NTDB id 1028 TT RS08215 WP 011173991.1
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 1110 NGFG RS09235 WP 003689817.1
NTDB id 1251 GC085 RS07725 WP 011946523.1
NTDB id 30146 ABAYE RS17130 WP 001274987.1
NTDB id 1058 ABD1 RS01615 WP 001274986.1
NTDB id 1018 ACIAD RS01685 WP 004920473.1
consensus



641
889
562
561
561
558
574
570
570
570

logo

NTDB id 1410 SGL RS13950 WP 010873519.1	KRKSALTCRTCAAELQQEWLDCPYCMTSRFS	672
NTDB id 1028 TT RS08215 WP 011173991.1	.....	889
NTDB id 1168 A1552VC RS11070 WP 000957200.1	.....	562
NTDB id 1293 VP RS12240 WP 005479695.1	.....	561
NTDB id 1401 DSB67 RS12665 WP 010643259.1	.....	561
NTDB id 1110 NGFG RS09235 WP 003689817.1	.....	558
NTDB id 1251 GC085 RS07725 WP 011946523.1	.....	574
NTDB id 30146 ABAYE RS17130 WP 001274987.1	.....	570
NTDB id 1058 ABD1 RS01615 WP 001274986.1	.....	570
NTDB id 1018 ACIAD RS01685 WP 004920473.1	.....	570
consensus		

-  non conserved
-  similar
-  ≥ 50% conserved