

Reference sequence (1): YP_009008111.1
Identities normalised by aligned length.
Colored by: identity

	cov	pid	1 [	]	98
1 YP_009008111.1	100.0%	100.0%	MKCEDIIINSMVQYCAIFNREFEMVA---THKLTDEQKKILERMHNRVDYIFETYKEYLDALAEFDRTGVLKINGKVLVVRKYENENEK--ENEDKYLNLQ	----	G
2 WP_012713850.1	73.5%	67.6%	-----MVI-----THKLTDEQKKILERMHNRVDYIFETYKEYFDTLAEFDRTGVLKINGKVLVVRKYENENEK--ENEDKYLNLQ	----	
3 WP_012716295.1	73.5%	67.6%	-----MVI-----THKLTDEQKKILERMHNRVDYIFETYKEYFDKLAEFDRTGVLKINGKVLVVRKYENENEK--ENEDKYLNLQ	----	
4 YP_009218527.1	67.5%	75.4%	-----M-----VTDEQKKILERMHNRVDYIVEKYKEYLDALAEFDRTGVLKINGKVLVVRKYENENEK--ENEDKYLNLQ	----	S
5 MCQ4343981.1	73.5%	67.6%	-----MVI-----TPKLTDEQKKILERMHNRVDYIFETYKEYFDALAEFDRTGVLKINGKVLVVRKYSEK--ENEDKYLNLQ	----	
6 WP_088922599.1	73.5%	67.1%	-----MVI-----THKLTDEQKKILERMQRSDYIIKAHKEYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
7 YP_009230287.1	73.5%	71.2%	-----MVI-----THKLTDEQKKILERMHNRVDYIIKAYKEYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
8 WP_012953061.1	73.5%	65.7%	-----MVI-----THKLTDEQKKILERMQRSDYIIKAHKEYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
9 WP_009991957.1	73.5%	65.7%	-----MVI-----THKLTDEQKKILERMQRSDYIIKAHKEYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
10 MCG2909053.1	95.2%	55.9%	MAQIFY-KS---FNSIANRELKMI-----TPKLTDEQKKILERMHNRVDYIFETYKEYFDALAEFDRTGVLKINGKVLVVRKYSEK--ENEDKYLNLQ	----	
11 PVU74284.1	73.5%	65.7%	-----MVI-----THKLTDEQKKILERMQRSDYIIKVKKEYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
12 PVU75519.1	73.5%	65.7%	-----MVI-----THKLTDEQKKILERMQRSDYIIKAHKEYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
13 WP_012718863.1	95.2%	58.5%	MKIDII-SS---IDVIVNREFKVV---SHNLTDEQKKILERMNRVDYIIKTHKEYLDALAEFDRTGVLKINGKVLVVRKHMGOEENKDKQLNLQ	----	
14 WP_013776033.1	72.3%	64.3%	-----MVI-----THKLTDEQKKILERMQRSDYIIKAHKEYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
15 YP_009226296.1	68.7%	75.4%	-----MV-----THKLTDEQKKILERMNRVDYIIVDAYKEYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	K
16 WP_052846491.1	73.5%	65.2%	-----MVI-----SHNLTDEQKKILERMQRSDYIIKAHKEYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
17 YP_009362831.1	72.3%	71.0%	-----MTR-----VHKLTAEQKKILERMNRVDYIIKAYKEYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
18 YP_009362552.1	72.3%	71.0%	-----MAR-----VHKLSAQKKILERMNRVDYIIKAYKEYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
19 WP_054845482.1	73.5%	61.1%	-----MVI-----THKLTDEQKKILERMNRVDYIIKAYKEYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
20 YP_009362555.1	72.3%	67.7%	-----MTR-----VHKLTAEQKKILERMNRVDYIIETYSYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
21 YP_009362678.1	72.3%	67.7%	-----MTR-----VHKLTAEQKKILERMNRVDYIIETYSYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
22 WP_236753206.1	71.1%	58.2%	-----MAI-----TISDEDRKILKRMNRVDYIIFSLYKEYFDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
23 WP_229571002.1	71.1%	59.7%	-----MAI-----TISDEDRKILKRMNRVDYIIFSLYKEYFDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
24 WP_052846537.1	71.1%	56.7%	-----MAI-----VISDEDRKILKRMNRVDYIIFSLYKEYFDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
25 WP_054837064.1	73.5%	45.6%	-----MGL-----ATAIRDEKDKILKRMNRVDYIIFSLYKEYFDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
26 WP_184651096.1	66.3%	50.0%	-----MTDEISEIRNDLYKRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
27 WP_232616535.1	66.3%	42.6%	-----MTDQISEIRNDLYKRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
28 WP_156005284.1	73.5%	40.9%	-----MRNKIYNLEKMTQTSSETGKDYLMRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
29 WP_238527872.1	48.2%	54.0%	-----MGHSLETYREYFDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
30 WP_229571697.1	66.3%	46.4%	-----MTDEISEIRNDLYKRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
31 WP_016729867.1	72.3%	38.7%	-----MYK-----RKMTEQVSEIQKDLKRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
32 WP_009074432.1	73.5%	41.2%	-----MVMLE-FDTSLTGEEVSLLEALNRRADFVLDEYKDYFKALEFEKTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
33 WP_170254143.1	68.7%	41.9%	-----MT-----V---NQVEIEEIRRDLYKRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
34 ACP37521.1	72.3%	37.1%	-----MYK-----RKMTEQVSEIQKDLKRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
35 ACP54664.1	72.3%	37.1%	-----MYK-----RKMTEQVSEIQKDLKRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
36 ACR41344.1	72.3%	37.1%	-----MYK-----RKMTEQVSEIQKDLKRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
37 ADX81997.1	72.3%	37.1%	-----MYK-----RKMTEQVSEIQKDLKRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
38 ADX84776.1	72.3%	37.1%	-----MYK-----RKMTEQVSEIQKDLKRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
39 WP_236752582.1	68.7%	41.5%	-----MV-----V---SQSEIEEIRRDLYKRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
40 WP_012710794.1	72.3%	37.1%	-----MYK-----RKMTEQVSEIQKDLKRAEFVLTYYKYLDALAEFDRTGVLKINGKVLVVRKYNNQ--ENEDKRFNLQ	----	
consensus/100%			hta.hp.apc.hptLteA+oG1K1ptc.ly.tc.....		
consensus/90%			M.....hotp.pcl.cch.prhpalhpha+cYhDALAEFD+G1K1pGcllyst+hptp.....		
consensus/80%			Mh.....hT-p.pcihchpprh-allsaKcYhDALAEFD+G1K1cGKVLVpKhpsp.....		
consensus/70%			Mhh.....phT-E.pcihchpprs-allsYK-YhDALAEFDRTGVLK1cGKVLVpKhpsp.....		

Reference sequence (1): WP_010979162.1
Identities normalised by aligned length.
Colored by: identity

	cov	pid	1	80
1 WP_010979162.1	100.0%	100.0%	---MENKLMQILEGLLNEFEKWRSD---RVPTIIQIHDSITRNDP-NTERGIVNLDITIGITIY---SAIENLSL	
2 WP_232049044.1	75.7%	78.3%	---MENKLMQILEGLLNEFEKWRSD---MKRDP-NTFGIINVDVIGIAIY---SAIEDLNN	
3 WP_012718862.1	100.0%	80.3%	---MESKLMQILEGLLNEFEKWRSGKSN---IEPTIIKIHSIIRSDP-NTERGIIINLDVIGIAIY---SAIEDLSN	
4 WP_012953062.1	100.0%	81.6%	---MESKLMQILEGLLNEFEKWRSGKSD---IEPTIIKIHSIIRSDP-NTELGIINLDVIGIAIY---SAIEDLNN	
5 PVU75520.1	100.0%	80.3%	---MESKLMQILAGLLNEFEKWRSGKSD---IEPTIIKIHSIIRSDP-NTQGGIINLDVIGIAIY---SAIEDLNN	
6 WP_048054638.1	97.4%	81.1%	---MESKLMQILAGLLNEFEKWRSGSD---IEPTIIKIHSIIRSDP-NTQGGIINLDVIGIAIY---SAIEDLNN	
7 WP_009991959.1	100.0%	81.6%	---MESKLMQILEGLLNEFEKWRSGSD---IEPTIIKIHSIIRSDP-NTQGGIINLDVIGIAIY---SAIEDLNN	
8 PVU74283.1	100.0%	81.6%	---MESKLMQILAGLLNEFEKWRSGSD---IEPTIIKIHSIIRSDP-NTQGGIINLDVIGIAIY---SAIEDLNN	
9 WP_088922621.1	100.0%	80.3%	---MESKLMQILAGLLNEFEKWRSGSD---IEPTIIKIHSIIRSDP-NTQGGIINLDVIGIAIY---SAIEDLNN	
10 WP_054837063.1	100.0%	56.5%	MSNLEEQKLEIFNALLKEFNIRKGESQ---EEPLIINIHDKVVANDP-TSAQGINMRDNIGLTIY---SAITDLNR	
11 WP_229571003.1	100.0%	56.3%	---MLEEKLKILEVLLKEFEAWIRGKSE---EKPLIIEIHDKLIANNT-YSEGGINLDIGIAIY---SAIEDLNR	
12 WP_052846538.1	100.0%	54.7%	MNILLEENLLKILNALLKEFEAWIRGESE---EKPLIIEIHDKLIANDT-YSEGGINLDIGIAIY---SSIEDLNR	
13 WP_229571468.1	100.0%	58.2%	MSILLEETLLKILRLILREFEAWNIGESK---EKPLIIEIHDKVIASNA-ESEQGINSDNIGIAIY---SAIEDLNQ	
14 WP_016731964.1	100.0%	58.9%	MSILLEETLLKILRLILREFEAWSSGESK---EKPLIIEIHDKVIANNA-ESEQGINSDNIGIAIY---SAIEDLNQ	
15 MCQ4343980.1	100.0%	64.9%	---MESKLMQILAGLLNEFEKWRSGSD---KEPLIIEIHEKVVSNDP-YTEQGVINLDVSIAYI---SAIEDLNR	
16 WP_238526128.1	78.9%	63.1%	---MESKLMQILAGLLNEFEKWRSGSD---MHDKVVSNDP-YTEQGVINLDVSIAYI---SAIEDLNR	
17 WP_238526249.1	73.0%	60.2%	---MESKLMQILAGLLNEFEKWRSGSD---M-HGLSETVVGNDVSIAYI---SAIEDLNR	
18 WP_238527871.1	69.7%	62.0%	---MESKLMQILAGLLNEFEKWRSGSD---MDFIKGDVSIAYI---SAIEDLNR	
19 WP_236752583.1	90.1%	34.8%	---MESKFQITILNSLDKDFIIMLNQOV---VNE-DP-SSTFGLVNPDNIDGAIY---SAIYDFEE	
20 MQL56197.1	64.5%	39.6%	---MESKFQITILNSLDKDFIIMLNQOV---MDGAIY---SAIYDFEE	
21 WP_231136444.1	59.2%	37.8%	---MESKFQITILNSLDKDFIIMLNQOV---MFDLEE	
22 WP_016729866.1	89.5%	34.6%	---MESKLRAIITSLSKTFIIMLNDRV---LKEEDP-SLTSIVINEGNEGIAIY---SAILDFEI	
23 WP_012710793.1	89.5%	34.0%	---MESKLRAIITSLSKTFIIMLNDRV---LKEEDP-SLTSIVINEGNEGIAIY---SAILDFEI	
24 WP_014512183.1	89.5%	33.3%	---MESKLRAIITSLSKTFIIMLNDRV---LKEEDP-SLTSIVINEGNEGIAIY---SAILDFEI	
25 WP_012735676.1	89.5%	33.3%	---MESKLRAIITSLSKTFIIMLNDRV---LKEEDP-SLTSIVINEGNEGIAIY---SAILDFEI	
26 WP_012718553.1	89.5%	32.7%	---MESKLRAIITSLSKTFIIMLNDRV---LKEEDP-SLTSIVINEGNEGIAIY---SAILDFEI	
27 WP_052846531.1	89.5%	30.2%	---MENKFRILVITSLDKSFITWLNDRV---LKEEDP-SLTSIVINEGNEGIAIY---SAVMDFEI	
28 WP_156013372.1	89.5%	32.1%	---MGKFKQILASLDKSFITWLNDRV---LKEEDP-SLTSIVINEGNEGIAIY---SAILDFEI	
29 WP_229571696.1	89.5%	31.4%	---MENKFMILASLDKSFITWLNDRV---LKEEDP-SLTSIVINEGNEGIAIY---SAILDFEI	
30 MBU4491207.1	67.1%	17.4%	---MENKFMILASLDKSFITWLNDRV---EETGGN---KGVNLFGLNKASVSRFAAPFGDQEL	
31 MCL4339950.1	77.6%	18.5%	---MENKFMILASLDKSFITWLNDRV---MRYOYL-TREQVVAIEHEEVIMKYGGG---EGTISESIELAISRPNSVLFYGP	
32 MBI2676267.1	71.1%	14.4%	---MENKFMILASLDKSFITWLNDRV---MNSEYIIDKNQIRLIN---EMYGGY---LRSDAEIETAL---YLKG	
33 MBI5061864.1	71.1%	18.0%	---MENKFMILASLDKSFITWLNDRV---MNSEYIITKEQIKWIN---EQYGGG---LRTDAEITETAL---DLKG	
34 MCK4714356.1	71.1%	15.8%	---MENKFMILASLDKSFITWLNDRV---MNSEYIIPKEQIKAIN---ERYGGG---LRTDAEITETAL---SMGR	
35 WP_052368754.1	77.0%	18.9%	---MENKFMILASLDKSFITWLNDRV---MVEAEKDILIP-STDDIITIN---QKLGGT---VLNRGIDFIIAKIEAKVPKDDY	
36 MBU0586829.1	75.7%	18.2%	---MENKFMILASLDKSFITWLNDRV---MLKYL-SSLQIISHDRIIEEFSKE---KGOMNIGLEATLVRMD---YKGD	
37 MBN1133826.1	75.0%	18.8%	---MENKFMILASLDKSFITWLNDRV---MTEI-STKSIIIDHNRIIEFGGSDSTPGILSEGNDIFIVF---EVDR	
38 MBI4894851.1	73.7%	19.7%	---MENKFMILASLDKSFITWLNDRV---MGDL-TVGDVVEINRSIVDRFGVT---FGVLNMGMLNDFVVE---SAMH	
39 MCL5239032.1	72.4%	19.7%	---MENKFMILASLDKSFITWLNDRV---MEILYP-TTEEIVEIN---KKIGCD---GKFINQGNLDFTLN---KARN	
40 MBI2547095.1	73.0%	21.1%	---MENKFMILASLDKSFITWLNDRV---MKYL-TQELIHIHDDIIEKETGGH---GGILSYGNLDFIVN---QMKI	
41 MBI2543485.1	75.0%	19.9%	---MENKFMILASLDKSFITWLNDRV---MKVYVL-TIEEVVKIHEDMIKETGGH---PGIISYGNLDFIVN---QAKI	
42 MBI2085413.1	73.0%	23.5%	---MENKFMILASLDKSFITWLNDRV---MHDVSRSLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---AGMNVGNLDFIVA---QANY	
43 MBN2488821.1	66.4%	18.3%	---MENKFMILASLDKSFITWLNDRV---MKI-VIRAIQLHDKIIRKSGGH---AGMNVGNLDFIVA---QANY	
44 NJD52472.1	85.5%	20.9%	---MENKFMILASLDKSFITWLNDRV---MIENYGGG---KGTLYSATLDIVY---EINK	
45 MBU4220955.1	73.7%	23.0%	---MENKFMILASLDKSFITWLNDRV---MTIYDS---RVFKQVRSKGNQMAEL-TVRKIIIEHDEIIQKYGGT---SGVLSEATLEMLVY---KVRN	
46 MCG7849420.1	73.7%	22.9%	---MENKFMILASLDKSFITWLNDRV---MPL-TARQIIEIHDITILKKYGGT---GGVLNNEGILELIVY---KTSR	
consensus/100%			---MENKFMILASLDKSFITWLNDRV---MEEF-TVEQIIEIHDRIIDKYGGT---GRMLNTGTLELIVY---KLNR	
consensus/90%			s.....hhs.s.lthhl.....ph..	
consensus/80%			tp.s.p...hlls.sslthsl.....cht.	
consensus/70%			lhpp.s.p...thllN.sslthsl.....chp.	
	cov	pid	81	160
1 WP_010979162.1	100.0%	100.0%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
2 WP_232049044.1	75.7%	78.3%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---VPQDLEELI---KTAEVADNPPEEY	
3 WP_012718862.1	100.0%	80.3%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IQQDLEELI---KTAEVADNPPEEY	
4 WP_012953062.1	100.0%	81.6%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
5 PVU75520.1	100.0%	80.3%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
6 WP_048054638.1	97.4%	81.1%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
7 WP_009991959.1	100.0%	81.6%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
8 PVU74283.1	100.0%	81.6%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
9 WP_088922621.1	100.0%	80.3%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
10 WP_054837063.1	100.0%	56.5%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
11 WP_229571003.1	100.0%	56.3%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
12 WP_052846538.1	100.0%	54.7%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
13 WP_229571468.1	100.0%	58.2%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
14 WP_016731964.1	100.0%	58.9%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
15 MCQ4343980.1	100.0%	64.9%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
16 WP_238526128.1	78.9%	63.1%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
17 WP_238526249.1	73.0%	60.2%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
18 WP_238527871.1	69.7%	62.0%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
19 WP_236752583.1	90.1%	34.8%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
20 MQL56197.1	64.5%	39.6%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
21 WP_231136444.1	59.2%	37.8%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
22 WP_016729866.1	89.5%	34.6%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
23 WP_012710793.1	89.5%	34.0%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
24 WP_014512183.1	89.5%	33.3%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
25 WP_012735676.1	89.5%	33.3%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
26 WP_012718553.1	89.5%	32.7%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
27 WP_052846531.1	89.5%	30.2%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
28 WP_156013372.1	89.5%	32.1%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
29 WP_229571696.1	89.5%	31.4%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
30 MBU4491207.1	67.1%	17.4%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
31 MCL4339950.1	77.6%	18.5%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	
32 MBI2676267.1	71.1%	14.4%	YHDSRSRLAVLYHLLVSHPPFDGNKRTAFVLLLNILYELFENK---E---IPQDLEELI---KTAEVADNPPEEY	

25/10/2022, 12:25

MView

33	MBI5061864.1	71.1%	18.0%	GRNVYRKIAVLLKAILVGH	PFTDGNKRTALMVSLAILESCEIKIAG-----	KQKENLV--EEILKVAQE----	NI			
34	MCK4714356.1	71.1%	15.8%	GRNVYRKIAALWRAILVGH	PFTDGNKRTALMVVALYILESCDIRIPE-----	PRKESIV--REITKIARE----	NI			
35	WP_052368754.1	77.0%	18.9%	KRQIATIAAVFWFEIIQGH	PFDGNGKRTGTEIMKFLKKNNGFKLNT-----	PLAGLV--YISLKIANN----	EI			
36	MBU0586829.1	75.7%	18.2%	SEALFWKATIMLERIILGH	PFIDGNKRTGYEATKIFLLANGYRLII-----	KEEEVI---AMLIAIAQN----	KK			
37	MBN1133826.1	75.0%	18.8%	KKDLFEKGAFMLCNLI	TSHPFVDGNKRTAFQTTNLVFRNNGYFIFA-----	KDDVVE--DCLLKIASY----	KC			
38	MBI4894851.1	73.7%	19.7%	SQDVFRKAAELMYGIARGH	PFMDGNKRTAFEAAFLTLD	SFGIALKV-----	EPKEAE--DFMLRIVSSE----	SL		
39	MCL5239032.1	72.4%	19.7%	AKALTKKAAIILEGIVTG	HPFDGNGKRTAFVAMEFLKKNNGKELEH-----	TKSDEHLMERVLVDIAEN----	RI			
40	MBI2547095.1	73.0%	21.1%	PKTIERSAIVLFYGILTS	HPVDGNKRTGLESMTKTF	LYLNGKRFVA-----	EDNDIW--SKVHDTSEG----	KL		
41	MBI2543485.1	75.0%	19.9%	PKNIERIATTLFYGILTS	HPFDGNKRTAISVLETFL	EENDARLVA-----	KNEELW--NIVHIVSEG----	KL		
42	MBI2085413.1	73.0%	23.5%	VGNLTKKLATLFGIVARH	HPFDGNKRTALVVVEAILRTAGKRLTA-----	GEKDLW--VLLNKISIG----	EM			
43	MBN2488821.1	66.4%	18.3%	NNDVYRNAALVVKHIVTG	HPFMDGNKRTALGIAHYLES	KGLYITA-----	SKDKL--ELLKKTASY----	KV		
44	NJD52472.1	85.5%	20.9%	EHNVLQSSMVLHMIT	SOHPFDGNKRTALVTAEKMLYDEGYIIHA-----	EAEKKV--DFMIKIAEY----	KC			
45	MBU4220955.1	73.7%	23.0%	EKDI	FRKAAILHTIAAQ	HPFDGNKRTALAAAE	NLGEAGYYLHA-----	DDEIV--CLMQKIAEY----	KC	
46	MCG7849420.1	73.7%	22.9%	EKDI	FRQAALFLHAIAAQ	HPFDGNKRTAFAASE	NVLQEAGYYLNA-----	ETNEIV--NLMQKIAEY----	KC	
	consensus/100%			.t.....	h..l...	HSFhDg	UNKRTsh.....	hh.....	hu.....	p.
	consensus/90%			.psl.cph	Ahhhhthl.t	HPFhDg	UNKRTsh.hh..hl.p.....	t..p.h...	hhhclup.....	p.
	consensus/80%			.psl.rph	Allhatllsu	HPFSDg	UNKRTuhshhhthL.p.h.c.....	p..c.l...	philclupt.....	c.
	consensus/70%			.psl	oRplAlLhac	llisu	HPFSDg	UNKRTAhsllhplLtchhtc..t.....	ph.c.lh..philclApp.....	ch

		cov	pid	161	.	.	] 187
1	WP_010979162.1	100.0%	100.0%	AINKIRETIRQIIEG-----			
2	WP_232049044.1	75.7%	78.3%	TINKIRKIIQKIIE-----			
3	WP_012718862.1	100.0%	80.3%	AISKIRKIIQKIIE-----			
4	WP_012953062.1	100.0%	81.6%	AINKIRKIIKFIIE-----			
5	PVU75520.1	100.0%	80.3%	AINKIRKIIKFIIE-----			
6	WP_048054638.1	97.4%	81.1%	AINKIRKIIIE-----			
7	WP_009991959.1	100.0%	81.6%	AINKIRKIIKFIIE-----			
8	PVU74283.1	100.0%	81.6%	AINKIRKIIKFIIE-----			
9	WP_088922621.1	100.0%	80.3%	AINKIRKIIKFIIE-----			
10	WP_054837063.1	100.0%	56.5%	GINRIRNIIEIIHGILF-----			
11	WP_229571003.1	100.0%	56.3%	AISRIRSIIRDLPVNQD-----			
12	WP_052846538.1	100.0%	54.7%	AINRVRSTIRGLIPVNQD-----			
13	WP_229571468.1	100.0%	58.2%	AINKIREIIMQIIRD-----			
14	WP_016731964.1	100.0%	58.9%	AINKIREIIRQIIRD-----			
15	MCQ4343980.1	100.0%	64.9%	AINKIRGIIQRIIGD-----			
16	WP_238526128.1	78.9%	63.1%	AINKIRGIIQRIIGD-----			
17	WP_238526249.1	73.0%	60.2%	AINKIRGIIQRIIGD-----			
18	WP_238527871.1	69.7%	62.0%	AINKIRGIIQRIIGD-----			
19	WP_236752583.1	90.1%	34.8%	SINTLQVEIVIEKVIDLSCRH-----			
20	MLQ56197.1	64.5%	39.6%	DIRKLQKIIIEEIMSTYS-PYT-----			
21	WP_231136444.1	59.2%	37.8%	DIRKLQKIIIEEIMSTYS-PYT-----			
22	WP_016729866.1	89.5%	34.6%	EIRELQEIIGEIMRNLANPY-----			
23	WP_012710793.1	89.5%	34.0%	EIRELQEIIGEIMRNLANPY-----			
24	WP_014512183.1	89.5%	33.3%	EIRELQEIIGEIMRNLANPY-----			
25	WP_012735676.1	89.5%	33.3%	EIRELQEIIGEIMRNLANPY-----			
26	WP_012718553.1	89.5%	32.7%	EIRELQEIIGEIMRNLANPY-----			
27	WP_052846531.1	89.5%	30.2%	DIDLQKIIIEEIMKRLTVHY-----			
28	WP_156013372.1	89.5%	32.1%	DIDLQKIIIEEIMKRLANPY-----			
29	WP_229571696.1	89.5%	31.4%	DVDELQRIIEEIMKRLTNPY-----			
30	MBU4491207.1	67.1%	17.4%	SVEDIAEAWVKSQTKPCQTKPLINQNR			
31	MCL4339950.1	77.6%	18.5%	DILQVTDWINKHTSKLSKLDSP-----			
32	MBI2676267.1	71.1%	14.4%	TDVSRIERLVRYAATGN-----			
33	MBI5061864.1	71.1%	18.0%	TDVNRIERLVRYAATGN-----			
34	MCK4714356.1	71.1%	15.8%	TDINRIERLVRYAATGN-----			
35	WP_052368754.1	77.0%	18.9%	SYSELINWLYRRLLENGNLY-----			
36	MBU0586829.1	75.7%	18.2%	NRFSIKAWLTKHANLRAQPP-----			
37	MBN1133826.1	75.0%	18.8%	TEKEVKSWLKKRARKVKNTIQLQFS--			
38	MBI4894851.1	73.7%	19.7%	TVREVEMWIRRHGDWYE-----			
39	MCL5239032.1	72.4%	19.7%	TEESLQEIISELIK-----			
40	MBI2547095.1	73.0%	21.1%	KFEEIINWIKKSVK-----			
41	MBI2543485.1	75.0%	19.9%	KFEEVVKWIKVEVVKW-----			
42	MBI2085413.1	73.0%	23.5%	NVKQIAEWLSKNIA-----			
43	MBN2488821.1	66.4%	18.3%	NQKEIEKWLQENTRKL-----			
44	NJD52472.1	85.5%	20.9%	SVKTEIKWVKKSIRELHPG-----			
45	MBU4220955.1	73.7%	23.0%	TVKTEIKWVREKAKATSLPVS-----			
46	MCG7849420.1	73.7%	22.9%	SVQKIEKWVREKAAATSGPIS-----			
	consensus/100%			t..ph..hl.t.....			
	consensus/90%			t..pl.thl.p.ht.....			
	consensus/80%			shpplpphlthht.....			
	consensus/70%			slpclpchIpcchpt.....			