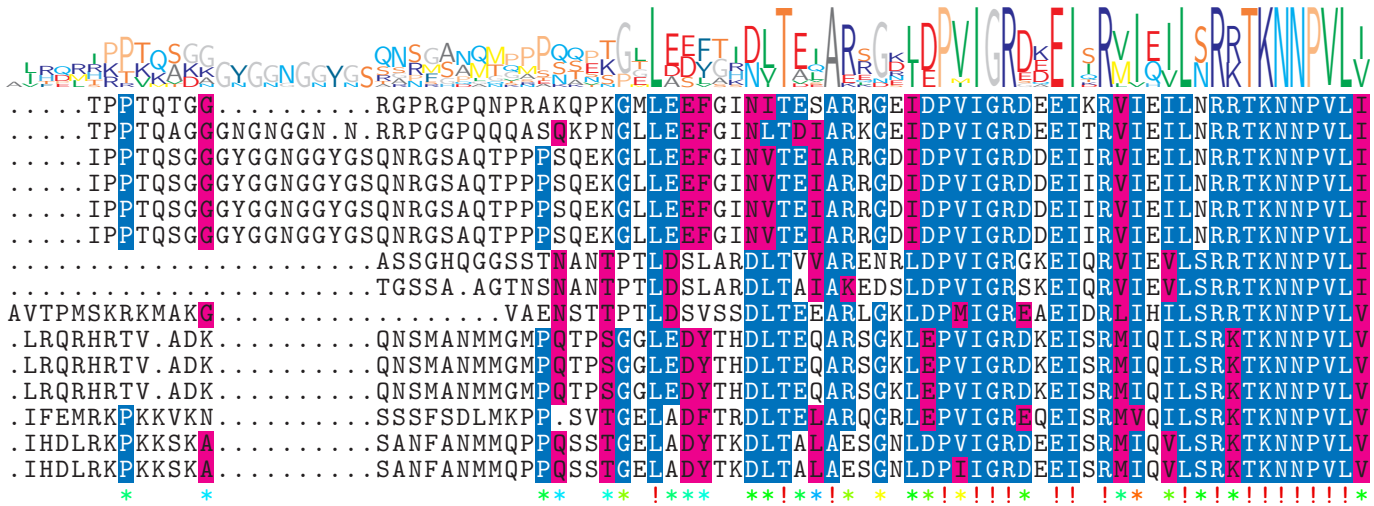


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NTDB id 243 SPR RS03635 WP 000882517.1	MLCQNCNINDS.....TI	13
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NTDB id 85 BSU 00860 NP 387967.1	..MMFGRFTERAQKVLALAQEEALRLGHNNIGTEHILLGLVREGEGLAAKALQALGLGSEKIQKEVESLIG.....RGQEMS	75
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NTDB id 290 KZH43 RS10025 WP 001109677.1	MNYSKALNECIESAYMVA GHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET	75
NTDB id 289 SPD RS10700 WP 001109677.1	MNYSKALNECIESAYMVA GHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET	75
NTDB id 287 SP RS11210 WP 001109712.1	MNYSKALNECIESAYMVA GHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET	75
NTDB id 377 SMU RS09275 WP 002262344.1	...MTDYS LKMQEVFRLAQFEAARFESSYLESWHVLLAMVEIDSSVAGLSFAEFADVRFEDYQAAAILAIGKKPKSSSN..DI	79
NTDB id 297 STER RS00545 WP 011680614.1	...MTIYSRKMQAIFHRAQLEAERFESPFL ETWHVLLAMVEVTGSVAYLTFTDFEDRIHSEEIETA AVLAMEKRPKDLSESDI	81
NTDB id 329 STU RS10020 WP 011225298.1	...MTIYSRKMQAIFHRAQLEAERFESPFL ETWHVLLAMVEVPGSVAYLTFTDFEDRIHSEEIETA AVLAMEKRPKDLSESDI	81
consensus	*** * * * * *	

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NTDB	id	378	SMU	RS02690	WP	002263569.1	HL	YANVNC	QKKKQ	ID	LCQNCYQ	I	...	M	K	T	D	P	E	N	G	P	L	N	H	S	Q	N	S	S	...	I	N	P	F	F	D	D	F	F	G	D	L	N	N	F	R	A	F	N	N	Q	D	L	P	N		80																																		
NTDB	id	241	SP	RS04015	WP	000882523.1	HL	YTNLNG	KKKKQ	ID	LCQNCYK	I	...	I	K	T	D	P	N	N	S	L	F	K	G	M	T	D	L	N	N	R	D	...	F	D	P	.	F	G	D	F	F	N	D	L	N	N	F	R	P	S	S	N	..	T	P	P		77																																
NTDB	id	281	KZH43	RS03550	WP	000882517.1	HL	YTNLNG	KKKKQ	ID	LCQNCYK	I	...	I	K	T	D	P	N	N	S	L	F	K	G	M	T	D	L	N	N	R	D	...	F	D	P	.	F	G	D	F	F	N	D	L	N	N	F	R	P	S	S	N	..	T	P	P		77																																
NTDB	id	245	SPD	RS03860	WP	000882517.1	HL	YTNLNG	KKKKQ	ID	LCQNCYK	I	...	I	K	T	D	P	N	N	S	L	F	K	G	M	T	D	L	N	N	R	D	...	F	D	P	.	F	G	D	F	F	N	D	L	N	N	F	R	P	S	S	N	..	T	P	P		77																																
NTDB	id	243	SPR	RS03635	WP	000882517.1	HL	YTNLNG	KKKKQ	ID	LCQNCYK	I	...	I	K	T	D	P	N	N	S	L	F	K	G	M	T	D	L	N	N	R	D	...	F	D	P	.	F	G	D	F	F	N	D	L	N	N	F	R	P	S	S	N	..	T	P	P		77																																
NTDB	id	122161	DJ46	RS23750	WP	000971179.1	Q	T	V	H	Y	T	P	R	A	K	K	V	I	E	L	S	M	D	E	A	R	K	L	G	H	S	Y	V	G	T	E	H	I	L	L	G	L	I	R	E	G	E	G	V	A	A	R	V	L	N	N	L	G	V	S	L	N	K	A	R	Q	Q	V	L	Q	..	L	L	G	S	N	E			146											
NTDB	id	85	BSU	00860	NP	387967.1	Q	T	I	H	Y	T	P	R	A	K	K	V	I	E	L	S	M	D	E	A	R	K	L	G	H	S	Y	V	G	T	E	H	I	L	L	G	L	I	R	E	G	E	G	V	A	A	R	V	L	N	N	L	G	V	S	L	N	K	A	R	Q	Q	V	L	Q	..	L	L	G	S	N	E			146											
NTDB	id	610	V4T04	RS10165	WP	012897346.1	S	T	L	R	F	S	P	R	A	E	E	V	M	T	A	A	S	F	L	A	I	H	N	N	S	E	A	V	G	T	E	H	L	L	Y	A	L	L	Q	V	E	D	G	F	G	L	Q	L	L	K	L		Q	K	I	N	I	V	S	L	R	K	E	L	E	K	R	T	G	L	K	V	P	E	S	K		153								
NTDB	id	290	KZH43	RS10025	WP	001109677.1	T	E	L	P	F	S	R	R	L	Q	I	L	F	D	E	A	E	Y	V	A	S	V	V	H	A	K	V	L	G	T	E	H	V	L	Y	A	I	L	H	D	S	N	A	L	A	T	R	I	L	E	R	A	G	F	S	Y	E	D	K	K	D	Q	V	K	I	A	A	L	R	N	L	E	E	R	A	G	W	T	R	E	D	L	K	A		160
NTDB	id	289	SPD	RS10700	WP	001109677.1	T	E	L	P	F	S	R	R	L	Q	I	L	F	D																																																																								

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NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 122161 DJ46 RS23750 WP 000971179.1
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NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 377 SMU RS09275 WP 002262344.1
NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
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NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 241 SP RS04015 WP 000882523.1
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NTDB id 377 SMU RS09275 WP 002262344.1
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NTDB id 329 STU RS10020 WP 011225298.1
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NTDB id 281 KZH43 RS03550 WP 000882517.1	GNMDAGNILKPALARGEELQLVGATTTLNEYR.IIEKDAALERRMQPVKVDPEPTVDETITILKGIQKKYEDYHHVQYTDAAIEAAAT	326
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NTDB id 122161 DJ46 RS23750 WP 000971179.1	GAIDASNILKPSLARGEELQCIGATTTLDEYRKYIEKDAALERRFQPIHVDEPSLDESTQILKGLRDRYEAAHHRVSIITDDAIDA AVK	377
NTDB id 85 BSU 00860 NP 387967.1	GAIDASNILKPSLARGEELQCIGATTTLDEYRKYIEKDAALERRFQPIQVDQPSVDESIQILQGLRDRYEAAHHRVSIITDDAIEAAVK	376
NTDB id 610 V4T04 RS10165 WP 012897346.1	SVNDAANILKPALARGDFQMVGATTYHEYQKYIEKDEALERRLARINVDEPSPDEAIAAILQGLREKFEDYHQVKFTDQAIKS AVM	390
NTDB id 290 KZH43 RS10025 WP 001109677.1	STLDAANILKPALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTILQGLKATYEKHHRVQITDEAVETAVK	403
NTDB id 289 SPD RS10700 WP 001109677.1	STLDAANILKPALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTILQGLKATYEKHHRVQITDEAVETAVK	403
NTDB id 287 SP RS11210 WP 001109712.1	STLDAANILKPALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTILQGLKATYEKHHRVQITDEAVETAVK	403
NTDB id 377 SMU RS09275 WP 002262344.1	STLDAANILKPALARGSLRTIGATTQEEYQKHIEKDAALSRRFAKVTIEEPSEEEAYQILLGLKKS YET YHHV IISDAAVMAAVK	407
NTDB id 297 STER RS00545 WP 011680614.1	STLDAANILKPALARGTLHVMVGATTQA EYQKHIEKDAALSRRFAKITIEEPSVSEATDILNGLRSSYEDYHRVTITDAAVETAVK	410
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consensus	*!!!!!!!!*!!!!*****!!!!!! !! * !!!!!*!!!! * ****!*****!! !** *!****! *! !****!	

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NTDB id 122161 DJ46 RS23750 WP 000971179.1	LSDRYITDRFLPDKAIDLIDEAASKVRLRSYTTTPNLKELEVKLEEIRKEKDAAVQSQEF EKAASLRDMEQRLREKLEDTKRQWK	462
NTDB id 85 BSU 00860 NP 387967.1	LSDRYISDRFLPDKAIDLIDEAASKVRLRSFTTPPNLKELEQKLEVRKEKDAAVQSQEF EKAASLRDTEQRLREQVEDTKKSWK	461
NTDB id 610 V4T04 RS10165 WP 012897346.1	LSVRYMTSRKLPDKAIDLDEAAA AVKISVKNQQT KRLDLEKELAEAEQEELSEAVIKLDIKASRTKEKAVEKIADKIYKFS....	471
NTDB id 290 KZH43 RS10025 WP 001109677.1	MAHRYLTSRHL PDS AIDLDEAAATVQNKAKHV KADDSDL.....S....PADKALMDGKWKQAAQLIAKEE.....E....	467
NTDB id 289 SPD RS10700 WP 001109677.1	MAHRYLTSRHL PDS AIDLDEAAATVQNKAKHV KADDSDL.....S....PADKALMDGKWKQAAQLIAKEE.....E....	467
NTDB id 287 SP RS11210 WP 001109712.1	MAHRYLTSRHL PDS AIDLDEAAATVQNKAKHV KADDSDL.....S....PADKALMDGKWKQAAQLIAKEE.....E....	467
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consensus	** !!!!! * !!!!!*!!!!!!*!!!!* **** * * * **** * * !* ** *	

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NTDB id	241	SP	RS04015	WP	000882523.1	KITDQDTPSISEKT	IEHIIIEQKTNIPV	GDLEKEEQSQLIH	LAEDLKSHVIGQD	DAVDKIAKAIRNRV	VGLGTPNRPI	GSFLFVGP	488		
NTDB id	281	KZH43	RS03550	WP	000882517.1	KITDQDTPITISEKT	IEHIIIEQKTNIPV	GDLEKEEQSQLIH	LAEDLKSHVIGQD	DAVDKIAKAIRNRV	VGLGTPNRPI	GSFLFVGP	488		
NTDB id	245	SPD	RS03860	WP	000882517.1	KITDQDTPITISEKT	IEHIIIEQKTNIPV	GDLEKEEQSQLIH	LAEDLKSHVIGQD	DAVDKIAKAIRNRV	VGLGTPNRPI	GSFLFVGP	488		
NTDB id	243	SPR	RS03635	WP	000882517.1	KITDQDTPITISEKT	IEHIIIEQKTNIPV	GDLEKEEQSQLIH	LAEDLKSHVIGQD	DAVDKIAKAIRNRV	VGLGTPNRPI	GSFLFVGP	488		
NTDB id	122161	DJ46	RS23750	WP	000971179.1	EQQGKENSEVTVED	IANVVSTWTRIPV	SKLAQTETDKLL	NLESILHDRVIGQ	DEAVVAVAKAVRR	ARAGLKDPKR	PIGSFI	FLGP	547	
NTDB id	85	BSU	00860	NP	387967.1	EKQGGQENSEVTVDD	DIAMVVSSWTGVP	VSKEIAQTETDKL	NMENILHSRVIGQ	DEAVVAVAKAVRR	ARAGLKDPKR	PIGSFI	FLGP	546	
NTDB id	610	V4T04	RS10165	WP	012897346.1	VKEDKRQEVTDQAV	VAVASTLTGVPIT	QMTKSESDRLIN	LEKELHKKRVGQ	EEAISA	VSRAIRRARSGV	ADSRPM	GSMF	FLGP	555
NTDB id	290	KZH43	RS10025	WP	001109677.1	VPV.YKDLVTESD	ILTTLSRLSGIPV	QKLTQTDAKKYL	NLEAEALHKKRV	IGQDQAVSS	ISRAIRRNQSG	IRSHKRP	IGSFM	FLGP	550
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NTDB id	287	SP	RS11210	WP	001109712.1	VPV.YKDLVTESD	ILTTLSRLSGIPV	QKLTQTDAKKYL	NLEAEALHKKRV	IGQDQAVSS	ISRAIRRNQSG	IRSHKRP	IGSFM	FLGP	550
NTDB id	377	SMU	RS09275	WP	002262344.1	PLLKKRAEVKKEED	ILATLSKLSGIPV	KKLTQADSKKYL	NLERELHKKRV	IGQDDAVSS	ISRAIRRNQSG	IRVGKRP	IGSFM	FLGP	553
NTDB id	297	STER	RS00545	WP	011680614.1	AKFFPKPALVDADQ	IMQTL SRLSGIP	VEKMTQTDSKRY	LNLESELHKKRV	IGQDEAVSA	ISRAIRRNQSG	IRTGKRP	IGSFM	FLGP	556
NTDB id	329	STU	RS10020	WP	011225298.1	AKFFPKPALVDADQ	IMQTL SRLSGIP	VEKMTQTDSKRY	LNLESELHKKRV	IGQDEAVSA	ISRAIRRNQSG	IRTGKRP	IGSFM	FLGP	556
consensus						*	*****	*	***	*	*****	*****	*****	*****	*****

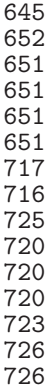
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NTDB id	378	SMU	RS02690	WP	002263569.1	TGVGKTEL	SKQLAI	ELFGS	ED	S	MIRFDMSEYMEKH	AV	AKL	V	GAPPGYVGVE	E	A	QGLTEK	V	R	R	N	P	Y	S	L	I	L	L	D	E	V	E	K	A	H	P	D	V	M	H	M	F	L	574																																																																																																																																																																																																																																																																																																																																																																																																											
NTDB id	241	SP	RS04015	WP	000882523.1	TGVGKTEL	SKQLAI	ELFGS	AD	S	MIRFDMSEYMEKHSV	AKL	V	GAPPGYVGVE	D	E	A	QGLTEK	V	R	H	N	P	Y	S	L	I	L	L	D	E	V	E	K	A	H	P	D	V	M	H	M	F	L	573																																																																																																																																																																																																																																																																																																																																																																																																											
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NTDB id	122161	DJ46	RS23750	WP	000971179.1	TGVGKTEL	ARALAE	S	M	F	G	D	E	A	MIRIDMSEYMEKH	ST	S	R	L	V	G	S	P	P	G	Y	V	G	E	E	G	Q	L	T	E	K	V	R	R	K	P	Y	S	V	L	L	D	E	V	E	K	A	H	P	D	V	F	N	I	L	632																																																																																																																																																																																																																																																																																																																																																																																											
NTDB id	85	BSU	00860	NP	387967.1	TGVGKTEL	ARALAE	S	I	F	G	D	E	S	MIRIDMSEYMEKH	ST	S	R	L	V	G	S	P	P	G	Y	V	G	E	E	G	Q	L	T	E	K	V	R	R	K	P	Y	S	V	L	L	D	E	T	E	K	A	H	P	D	V	F	N	I	L	631																																																																																																																																																																																																																																																																																																																																																																																											
NTDB id	610	V4T04	RS10165	WP	012897346.1	TGVGKTEL	AKALAD	S	V	F	G	S	E	D	NMIRVDMSE	F	M	E	K	H	S	T	S	R	L	I	G	A	P	P	G	Y	V	G	E	E	G	Q	L	T	E	R	V	R	N	K	P	Y	S	V	L	L	D	E	V	E	K	A	H	P	D	V	F	N	I	M	L	640																																																																																																																																																																																																																																																																																																																																																																																				
NTDB id	290	KZH43	RS10025	WP	001109677.1	TGVGKTEL	AKALAE	V	L	F	D	D	E	S	A	L	I	R	F	D	M	S	E	Y	M	E	K	F	A	A	S	R	L	N	G	A	P	P	G	Y	V	G	E	E	G	E	L	T	E	K	V	R	N	K	P	Y	S	V	L	L	F	D	E	V	E	K	A	H	P	D	I	F	N	V	L	635																																																																																																																																																																																																																																																																																																																																																																												
NTDB id	289	SPD	RS10700	WP	001109677.1	TGVGKTEL	AKALAE	V	L	F	D	D	E	S	A	L	I	R	F	D	M	S	E	Y	M	E	K	F	A	A	S	R	L	N	G	A	P	P	G	Y	V	G	E	E	G	E	L	T	E	K	V	R	N	K	P	Y	S	V	L	L	F	D	E	V	E	K	A	H	P	D	I	F	N	V	L	635																																																																																																																																																																																																																																																																																																																																																																												
NTDB id	287	SP	RS11210	WP	001109712.1	TGVGKTEL	AKALAE	V	L	F	D	D	E	S	A	L	I	R	F	D	M	S	E	Y	M	E	K	F	A	A	S	R	L	N	G	A	P	P	G	Y	V	G	E	E	G	E	L	T	E	K	V	R	N	K	P	Y	S	V	L	L	F	D	E	V	E	K	A	H	P	D	I	F	N	V	L	635																																																																																																																																																																																																																																																																																																																																																																												
NTDB id	377	SMU	RS09275	WP	002262344.1	TGVGKTEL	AKALAE	V	L	F	D	D	E	S	A	L	I	R	F	D	M	S	E	Y	M	E	K	F	A	A	S	R	L	N	G	A	P	P	G	Y	V	G	E	E	G	E	L	T	E	K	V	R	N	K	P	Y	S	V	L	L	F	D	E	V	E	K	A	H	P	D	I	F	N	I	L	638																																																																																																																																																																																																																																																																																																																																																																												
NTDB id	297	STER	RS00545	WP	011680614.1	TGVGKTEL	AKALAE	V	L	F	D	D	E	S	A	L	I	R	F	D	M	S	E	Y	M	E	K	F	A	A	S	R	L	N	G	A	P	P	G	Y	V	G	E	E	G	E	L	T	E	K	V	R	N	K	P	Y	S	V	L	L	F	D	E	T	E	K	A	H	P	D	I	F	N	I	L	641																																																																																																																																																																																																																																																																																																																																																																												
NTDB id	329	STU	RS10020	WP	011225298.1	TGVGKTEL	AKALAE	V	L	F	D	D	E	S	A	L	I	R	F	D	M	S	E	Y	M	E	K	F	A	A	S	R	L	N	G	A	P	P	G	Y	V	G	E	E	G	E	L	T	E	K	V	R	N	K	P	Y	S	V	L	L	F	D	E	T	E	K	A	H	P	D	I	F	N	V	L	641																																																																																																																																																																																																																																																																																																																																																																												
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NTDB id 601 KW2 RS02615 WP 021036805.1
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NTDB id 241 SP RS04015 WP 000882523.1
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NTDB id 85 BSU 00860 NP 387967.1
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NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
NTDB id 287 SP RS11210 WP 001109712.1
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NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
consensus

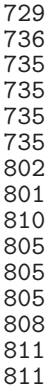
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NTDB id 601 KW2 RS02615 WP 021036805.1
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NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 377 SMU RS09275 WP 002262344.1
NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
consensus

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logo

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consensus		



-  non conserved
-  similar
-  ≥ 50% conserved