

```

*      20      *      40      *      60      *      80
ref|XP_012726090.1| : ---MEILSAFVSAALVCLVN--GAHTDIHWYQ---EGALDQKHWANKYPACGGGKQSPIDIQRSKVKYDGMQLQLELSGY : 74
ref|XP_007570993.1| : ---MEILSAFVSAALVCLVN--AGAHTDIHWYK---EGALDQTHWATKYPACGGGKQSPIDIQRNRVFNQNMQLQLELSGY : 74
ref|XP_008411549.1| : ---MEILSAFISAALVCLVN--AGAHSDIHWYK---EGALDQMHWATKYPACGGGKQSPIDIQRNRVFNQNMQLQLELTCY : 74
ref|XP_004070439.1| : ---MEVLSAILSALLRFVA----ADNRHHTWY---EGALDQHWATEYYPACAGGKQSPIDIQRNRVKNHNEMLQLELSNY : 72
emb|CAF93821.1| : ---MELILVSVS--ALVCVV--NAGVHLDGIHWYK---EGALDQMHWPTKYPACGGGKQSPIDIQRNRVFNEDMLQLELSGY : 74
ref|XP_011620264.1| : ---MEQICVFASALFFCVV--SAGVHLDGIHWY---EGALDQMHWPTKYPACGGGKQSPIDIQRNRVFNEDMLQLELSGY : 75
ref|XP_013875818.1| : ---METLLSAFVSTVVICVV--SAGDPHEDIHWY---EGALDQMHWATKYPACGGGKQSPIDIQRNRVFNEDMLQLELSGY : 76
ref|XP_005478239.2| : ---MEIFCVFFSAIFAYVV--GDAIPHHGIHWY---EGALDQMHWATQYPACGGGKQSPIDIQRNRVFNEDMLQLELSGY : 75
ref|XP_006785611.1| : ---MEIFCVFFSALFAYVV--GDAIPHHGIHWY---EGALDQMHWGTQYPACGGGKQSPIDIQRNRVFNEDMLQLELSGY : 75
ref|XP_005914985.1| : ---MEIFCVFFSALFAYVV--GDAIPHHGIHWY---EGALDQMHWATQYPACGGGKQSPIDIQRNRVFNEDMLQLELSGY : 75
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ref|XP_008294025.1| : ---MDTLSVFVSAVLVSVV--GAGIPHDGIHWY---EGALDQMHWPTKYPACGGGKQSPIDIQRNRVFNEDMLQLELSGY : 75
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ref|XP_009295179.1| : ---MEQLTLVLL--FVTSLNFASAGVDGDYWTYS--GELDQKHWAKEYHDCGGQQSPIDIQRKRVYSRMOQLELTCY : 73
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ref|XP_005057921.1| : ---MLMAVLLFLLPP---LTHSHEVSWTY---EGELDEEHWGQHFPACAGGKQSPIDIQRKRVYNEHLPQIQLELSGY : 70
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gb|KFV72304.1| : -----EGELDEEHWGKHFADACAGKHOSPIDIQRKRVYNEHLPQIQLELSGY : 45
gb|KFU95365.1| : -----EGELDEEHWGEHFADACAGKHOSPIDIQRKRVYNEHLPQIQLELSGY : 45
gb|KFU99210.1| : ---E---EGELDEEHWGKHFTDCAGKHOSPIDIQRKRVYNEHLPQIQLELSGY : 45
ref|XP_010076305.1| : ---MRITA-GWFPLLLVP---LGCSDVHWY---GELDEEHWGKHFTDCAGKHOSPIDIQRKRVYNEHLPQIQLELSGY : 70
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gb|KFV47237.1| : -----EGELDEEHWGKRFADACAGKHOSPIDIQRKRVYNEHLPQIQLELSGY : 45
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gb|KFW11285.1| : -----EGELDEEHWGKHFADACAGKHOSPIDIQRKRVYNEHLPQIQLELSGY : 45
gb|KFQ66673.1| : -----EGELDEEHWGKHFADACAGKHOSPIDIQRKRVYNEHLPQIQLELSGY : 45
gb|KFQ93800.1| : -----EGELDEEHWGKHFADACAGKHOSPIDIQRKRVYNEHLPQIQLELSGY : 45
gb|KFP53434.1| : -----EGELDEEHWGKHFADACAGKHOSPIDIQRKRVYNEHLPQIQLELSGY : 45
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gb|KFM01971.1| : -----EGELDEEHWGKHFADACAGKHOSPIDIQRKRVYNEHLPQIQLELSGY : 45

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eg ld hw C gk QSPidIQR v np lqlsl gY

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*          100          *          120          *          140          *          160
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ref|XP_008411549.1| : DAQ-KGNRMTNNGHTVQIDLPESMKITKGLPQGQFQAVQHLHWGGDLESGAHTIDGSRVMAELHIVHYNSDKYKSF : 153
ref|XP_004070439.1| : DAQ-QGKFLMTNNGHTVQIDLPETMTISQGLPGIYTAQVHLHWGGSHQBSGAHTIDGVRVMAELHIVHYNSEKYKRSF : 151
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ref|XP_011620264.1| : NAQ-RGDFLMTNNGHTVQIDLPETMTITRGLPGKYTAVQHLHWGGWDLEASGAHTIDGIRVMAELHIVHYNSDKYKSF : 154
ref|XP_013875818.1| : DHQ-KGTFLMSNNGHVSQIDLPETMTITRGLPGKYTAVQHLHWGGWDLEASGAHTIDGIRVMAELHIVHYNSDKYKSF : 155
ref|XP_005478239.2| : DAQ-TGTFLMSNNGHVSQIDLPESMKITRGLPGKYTAVQHLHWGGWDLEASGAHTIDGIRVMAELHIVHYNSDKYKSF : 154
ref|XP_006785611.1| : DAQ-KGTFLMSNNGHVSQIDLPESMKITRGLPGKYTAVQHLHWGGWDLEASGAHTIDGIRVMAELHIVHYNSDKYKSF : 154
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ref|XP_008317045.1| : DTQ-RGTFRMSNNGHTVQIDLPETMTITRGLPGKYTAVQHLHWGGWDLEASGAHTIDGIRVMAELHIVHYNSDKYKSF : 154
ref|XP_010793030.1| : DAQ-SGNFLMSNNGHVSQIDLPETMTITRGLPGKYTAVQHLHWGGWDLEASGAHTIDGIRVMAELHIVHYNSDKYKSF : 155
ref|XP_008294025.1| : DAQ-MGNFLMSNNGHVSQIDLPESMTITRGLPGKYTAVQHLHWGGWDLEASGAHTIDGIRVMAELHIVHYNSDKYKSF : 154
ref|XP_002666525.1| : EDI-RGSFLMKNNGHVSVEQLPSTMKITKGFPHQYTAQVHLHWGGWDLEASGSEHTMDGIRVMAELHIVHYNSEKYPSF : 152
ref|XP_009295179.1| : EDI-RGSFLMKNNGHVSVEQLPSTMKITKGFPHQYTAQVHLHWGGWDLEASGSEHTMDGIRVMAELHIVHYNSEKYPSF : 152
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gb|KFP63671.1| : DQQ-KGNFLMTNNGHVSQIDLPETMTITRGLPARYTAVQHLHWGGWDLEASGAHTIDGIRVMAELHIVHYNSEKYKSF : 118
ref|XP_012681508.1| : DEI-NGKFLMTNNGHVSQIDLPETMTITRGLPDRYTAQVHLHWGGWDLEASGAHTIDGIRVMAELHIVHYNSEKYKSF : 121
ref|XP_010902628.1| : GPM-KGNFLMTNNGHVSQIDLPESMTITRGLPGRYTAQVHLHWGGWDLEASGAHTIDGIRVMAELHIVHYNSEKYPSF : 152
ref|XP_013989824.1| : DAQ-RGNFLMKNNGHVSVEQLPSTMKITKGLPGRYTAQVHLHWGGWDLEASGSEHTMDGIRVMAELHIVHYNSDKYKSF : 152
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ref|XP_005986136.1| : DGSQNGFKMTNNGHVSQIDLPETMTISGFTSNYTAQVHFWGGLEQBSGSEHTVDMGRVYAEHIVHYNSDKYKSF : 122
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ref|XP_009965819.1| : DGPLQGDFTMTNNGHVSQIDLPETLHISRGLPGLYTAQVHLHWGGDLESETSGSEHTIDGMRVYAEHIVHYNSADYSSF : 151
gb|KFV47237.1| : DGPLQGDFTMTNNGHVSQIDLPETMHSRGLPGLYTAQVHLHWGGDLESETSGSEHTIDGMRVYAEHIVHYNSADYSSF : 125
gb|KFO11499.1| : DGPLQGDFTMTNNGHVSQIDLPETMHSRGLPGLYTAQVHLHWGGDLESETSGSEHTIDGMRVYAEHIVHYNSADYSSF : 125
gb|KFQ78854.1| : DGPLQGDFTMTNNGHVSQIDLPETMHSRGLPGLYTAQVHLHWGGDLESETSGSEHTIDGMRVYAEHIVHYNSADYSSF : 125
gb|KFW11285.1| : DGPLQGDFTMTNNGHVSQIDLPETMHSRGLPGLYTAQVHLHWGGDLESETSGSEHTIDGMRVYAEHIVHYNSADYSSF : 125
gb|KFQ66673.1| : DGPSQGDFTMTNNGHVSQIDLPETMHSRGLPSLYTAQVHLHWGGDLESETSGSEHTIDGMRVYAEHIVHYNSADYSSF : 125
gb|KFQ93800.1| : DGPLQGDFTMTNNGHVSQIDLPETMHSRGLPGLYTAQVHLHWGGDLESETSGSEHTIDGMRVYAEHIVHYNSADYSSF : 125
ref|KFP53434.1| : DGPLQGDFTMTNNGHVSQIDLPETMHSRGLPGLYTAQVHLHWGGDLESETSGSEHTIDGMRVYAEHIVHYNSADYSSF : 125
gb|XP_009323546.1| : DGPLQGDFTMTNNGHVSQIDLPETMHSRGLPGLYTAQVHLHWGGDLESETSGSEHTIDGMRVYAEHIVHYNSADYSSF : 151
gb|KFM01971.1| : DGPLQGDFTMTNNGHVSQIDLPETMHSRGLPGLYTAQVHLHWGGDLESETSGSEHTIDGMRVYAEHIVHYNSADYSSF : 125

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d g f mtNnGhSvQidLpP m i Glp ytAvQmHlHWGG dLE SG EHT dG Ry AEHl VHyns Y sf

	*	180	*	200	*	220	*	240																																																																									
ref XP_012726090.1	:	TEA	QDKH	DGLAVLAFVYD	S	HYENTYY	SD	IS	NL	GKI	KFAGOS	MYIS	LDVRS	MLPENI	ND	FFRY	EG	SLT	TPPC	ES	I	W	:	233																																																									
ref XP_007570993.1	:	SEA	KDKS	DGLAVLAFVYD	Y	GHFENTYY	SD	IS	NL	EKI	KYAGOS	MNISS	LDVRS	MLPENI	SE	FFRY	EG	SLT	TPPC	ES	I	W	:	233																																																									
ref XP_008411549.1	:	SEA	KDKS	DGLAVLAFVYD	Y	GHFENTYY	SD	IS	NL	EKI	KYAGOS	MNISS	LDVRS	MLPENI	SE	FFRY	EG	SLT	TPPC	ES	I	W	:	233																																																									
ref XP_004070439.1	:	SEA	KDKK	DGLAVLAFVYD	D	GHFENTYY	SD	IAN	L	EKI	KYAGOS	MNITS	LDVRS	MLPENI	NE	FFRY	EG	SLT	TPPC	ES	I	W	:	231																																																									
emb CAF93821.1	:	I	E	A	R	D	K	P	D	G	L	A	V	L	A	F	V	Y	D	G	H	F	E	N	T	Y	Y	S	D	I	A	N	L	E	K	I	K	Y	A	G	O	S	M	N	I	S	S	L	D	V	R	S	M	L	P	E	N	I	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	233		
ref XP_011620264.1	:	I	E	A	R	D	K	P	D	G	L	A	V	L	A	F	V	Y	D	G	H	F	E	N	T	Y	Y	S	D	I	A	N	L	E	K	I	K	Y	A	G	O	S	M	N	I	S	S	L	D	V	R	S	M	L	P	E	N	I	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	234		
ref XP_013875818.1	:	SEA	KDKP	DGLAVLAFVYD	Y	GHFENTYY	SD	IS	NL	EKI	Q	FAGOT	MNISS	LDVRS	MLPENI	NE	FFRY	EG	SLT	TPPC	ES	I	W	:	235																																																								
ref XP_005478239.2	:	T	E	A	R	D	K	P	D	G	L	A	V	L	A	F	V	Y	D	G	H	F	E	N	T	Y	Y	S	D	I	A	N	L	E	K	I	K	Y	A	G	O	S	M	N	I	H	L	D	V	R	S	M	L	P	E	N	I	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	234			
ref XP_006785611.1	:	T	E	A	R	D	K	P	D	G	L	A	V	L	A	F	V	Y	D	G	H	F	E	N	T	Y	Y	S	D	I	A	N	L	E	K	I	K	Y	A	G	O	S	M	N	I	S	D	L	D	V	R	S	M	L	P	E	N	I	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	234		
ref XP_005914985.1	:	T	E	A	R	D	K	P	D	G	L	A	V	L	A	F	V	Y	D	G	H	F	E	N	T	Y	Y	S	D	I	A	N	L	E	K	I	K	Y	A	G	O	S	M	N	I	S	N	L	D	V	R	S	M	L	P	E	N	I	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	234		
ref XP_005454282.1	:	T	E	A	R	D	K	P	D	G	L	A	V	L	A	F	V	Y	D	G	H	F	E	N	T	Y	Y	S	D	I	A	N	L	E	K	I	K	Y	A	G	O	S	M	N	I	S	N	L	D	V	R	S	M	L	P	E	N	I	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	234		
ref XP_005733115.1	:	T	E	A	R	D	K	P	D	G	L	A	V	L	A	F	V	Y	D	G	H	F	E	N	T	Y	Y	S	D	I	A	N	L	E	K	I	K	Y	A	G	O	S	M	N	I	S	N	L	D	V	R	S	M	L	P	E	N	I	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	234		
ref XP_010739228.1	:	T	E	A	R	D	K	P	D	G	L	A	V	L	A	F	V	Y	D	G	H	F	E	N	T	Y	Y	S	D	I	S	T	L	D	K	I	K	Y	A	G	O	S	M	N	I	S	N	I	D	V	R	S	M	L	P	E	N	I	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	233		
ref XP_008317045.1	:	SEA	KDKP	DGLAVLAFVYD	Y	GHFENTYY	SD	IS	NL	D	K	I	K	Y	A	G	O	S	M	N	I	S	S	L	D	V	R	S	M	L	P	E	N	I	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	234																										
ref XP_010793030.1	:	T	E	A	R	D	K	T	D	G	L	A	V	L	A	F	V	Y	D	G	H	F	E	N	T	Y	Y	S	D	IS	NL	D	R	I	K	Y	T	A	G	O	S	M	N	I	S	I	G	I	D	V	R	S	M	L	P	E	N	I	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	235		
ref XP_008294025.1	:	T	E	A	R	D	K	P	D	G	L	A	V	L	A	F	V	Y	D	G	H	F	E	N	T	Y	Y	S	D	IS	NL	D	R	I	K	Y	A	G	O	S	M	N	I	S	S	L	D	V	R	S	M	L	P	E	N	I	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	234				
ref XP_002666525.1	:	E	E	A	K	N	K	P	D	G	L	A	V	L	A	F	F	E	D	G	H	F	E	N	T	Y	Y	S	D	IS	NL	A	N	I	K	Y	V	A	G	O	S	M	S	I	S	N	L	N	V	L	S	M	L	S	E	N	I	S	E	F	F	R	Y	K	G	S	L	T	T	P	P	C	E	S	V	W	:	232			
ref XP_009295179.1	:	E	E	A	K	N	K	P	D	G	L	A	V	L	A	F	F	E	D	G	H	F	E	N	T	Y	Y	S	D	IS	NL	A	N	I	K	Y	V	A	G	O	S	M	S	I	S	N	L	N	V	L	S	M	L	S	E	N	I	S	E	F	F	R	Y	K	G	S	L	T	T	P	P	C	E	S	V	W	:	232			
ref XP_007246352.1	:	E	E	A	V	D	K	P	D	G	L	A	V	L	A	F	F	E	D	G	H	F	E	N	T	Y	Y	S	E	I	N	N	L	A	K	V	R	A	G	O	S	M	N	I	S	S	L	D	V	R	S	M	L	P	E	N	I	A	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	230		
gb KPP63671.1	:	D	E	A	V	D	K	P	D	G	L	A	V	L	A	F	F	E	D	G	H	F	E	N	T	Y	Y	S	D	IS	NL	A	K	V	K	F	A	G	O	S	M	N	I	S	T	I	N	V	R	S	M	L	P	E	N	I	S	Q	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	198				
ref XP_012681508.1	:	A	E	A	K	D	K	S	D	G	L	A	V	L	A	F	F	E	D	G	H	F	E	N	T	Y	Y	S	D	IS	NL	A	K	V	K	F	A	G	O	S	M	N	L	S	T	I	N	V	R	S	M	L	P	E	N	M	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	201				
ref XP_010902628.1	:	D	E	A	R	N	K	T	D	G	L	A	V	L	A	F	F	E	D	G	H	F	E	N	T	Y	Y	S	D	E	I	N	N	L	A	K	V	K	F	A	G	O	S	M	N	I	S	T	I	N	V	R	S	M	L	P	E	N	I	N	D	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	V	W	:	232	
ref XP_013989824.1	:	Q	E	A	S	N	K	P	D	G	L	A	V	L	A	F	F	E	D	G	H	F	E	N	T	Y	Y	S	D	E	I	N	N	L	A	K	V	K	F	A	G	O	S	M	N	I	S	T	I	N	V	R	S	M	L	P	E	N	I	K	F	E	F	F	R	Y	E	G	S	L	T	T	P	P	C	E	S	I	W	:	232
ref XP_014002952.1	:	Q	E	A	S	D	K	P	D	G	L	A	V	L	A	F	F	E	D	G	H	F	E	N	T	Y	Y	S	D	E	I	S	N	L	G	K	V	R	A	G	O	T	T	Q	M	H	L	D	I	S	T	M	L	S	D	D	L	S	Q	F	F	R	Y	K	G	S	L	T	T	P	P	C	E	S	I	W	:	217			
ref XP_007900354.1	:	E	E	A	H	D	K	E	D	G	L	A	V	L	A	F	F	E	D	G	H	F	E	N	T	Y	Y	S	D	E	I	S	S	L	G	K	V	R	A	G	O	T	T	Q	M	H	L	D	I	S	T	M	L	S	D	D	L	S	Q	F	F	R	Y	K	G	S	L	T	T	P	P	C	E	S	I	W	:	217			
ref NP_01085550.1	:	D	E	A	K	D	K	N	G	L	A	V	L	A	F	L	Y	T	T	C	N	Y	E	N	T	Y	Y	S	D	E	I	S	L	A	K	I	R	F	A	G	O	S	E	T	E	M	H	T	L	D	V	M	A	M	L	P	E	N	I	V	N	F	E	R	Y	D	G	S	L	T	T	P	P	C	E	N	V	L	:	235	
ref XP_005986136.1	:	D	D	A	K	D	K	P	D	G	L	A	V	L	A	F	F	E	D	G	H	F	E	N	T	Y	Y	S	D	E	I	S	H	L	A	K	I	R	F	A	G	O	S	T	H	L	T	L	I	N	R	D	M	L	P	E	D	L	S	E	F	F	R	Y	K	G	S	L	T	T	P	P	C	E	S	I	W	:	202		
ref XP_007432107.1	:	E	E	A	K	D	K	P	D	G	L	A	V	L	A	F	L	V	G	T	H	F	E	N	T	Y	Y	S	D	E	I	T	K	L	D	K	V	K	F	A	G	E	S	T	I	L	H	S	L	I	L	A	M	L	E	D	N	I	S	E	F	F	R	Y	H	G	S	L	T	T	P	P	C	E	N	V	I	W	:	229	
ref XP_006035521.2	:	E	E	A	K	D	K	N	G	L	A	V	L	A	F	L	Y	D	G	H	F	E	N	T	Y	Y	S	K	E	I	S	N	L	A	K	I	R	F	A	G	O	S	M	R	L	T	S	L	D	V	Q	G	M	L	P	E	N	I	S	E	F	F	R	Y	P	G	S	L	T	T	P	P	C	E	S	V	I	W	:	231	
ref XP_014465858.1	:	E	E	A	K	D	K	N	G	L	A	V	L	A	F	L	Y	D	G	H	F	E	N	T	Y	Y	S	K	E	I	S	N	L	A	K	I	R	F	A	G	O	S	M	R	L	T	S	L	D	V	Q	G	M	L	P	E	N	I	S	E	F	F	R	Y	P	G	S	L	T	T	P	P	C	E	S	V	I	W	:	231	
ref XP_005293083.1	:	E	E	A	K	D	K	N	G	L	A	V	L	A	F	L	Y	D	G	H	F	E	N	T	Y	Y	S	E	I	S	N	L	A	K	I	R	F	A	G	O	S	T	K	L	S	L	D	V	Q	A	M	L	P	E	N	I	S	E	F	F	R	Y	P	G	S	L	T	T	P	P	C	E	S	V	I	W	:	231			
ref XP_006127158.1	:	E	E	A	K	D	K	N	G	L	A	V	L	A	F	L	Y	D	G	H	F	E	N	T	Y	Y	S	E	I	S	N	L	A	K	I	R	F	A	G	O	S	T	K	L	S	L	D	V	Q	A	M	L	P	E	N	I	S	E	F	F	R	Y	P	G																	

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*          260          *          280          *          300          *          320
ref|XP_012726090.1| : TVFDTPITLSDNQITKLESLIMLDNKLWNDYRIAQPLNDRVVESSFRQK-----KSLQDVIEYRFQKIEGLITSLG : 307
ref|XP_007570993.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFMPLRGK--GTFQQDEIESKLIKIEGLITSLG : 311
ref|XP_008411549.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFMPLRGK--GTFQQDEIESKLIKIEGLITSLG : 311
ref|XP_004070439.1| : TVFDTPITLSNQIRRLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRVRK--GSFLQDVIESREKIEGLITSLG : 309
emb|CAF93821.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIESKLIKIEGLITSLG : 311
ref|XP_011620264.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIESKLIKIEGLITSLG : 312
ref|XP_013875818.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIESKLIKIEGLITSLG : 313
ref|XP_005478239.2| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIESRLKIEGLITSIG : 312
ref|XP_006785611.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIESRLKIEGLITSIG : 312
ref|XP_005914985.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEMESRLKIEGLITSIG : 312
ref|XP_004554282.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEMESRLKIEGLITSIG : 312
ref|XP_005733115.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEMESRLKIEGLITSIG : 312
ref|XP_010739228.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIESRLKIEGLITSLG : 311
ref|XP_008317045.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIESKLIKIEGLITSLG : 312
ref|XP_010793030.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIESRLKIEGLITSLG : 313
ref|XP_008294025.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIESKLIKIEGLITSLG : 312
ref|XP_002666525.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLSK--GGMRQDEIEAKKRIEGLITSLD : 310
ref|XP_009295179.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLSK--GGMRQDEIEAKKRIEGLITSLD : 310
ref|XP_007246352.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEAKSNIESMITSLG : 308
gb|KPP63671.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEAKLKIIEGLITSLG : 276
ref|XP_012681508.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GSFRQDEIEFKLIKIEGLITSLG : 279
ref|XP_010902628.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 310
ref|XP_013989824.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 310
ref|XP_014002952.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIESKLIKIEGLITSLG : 310
ref|XP_007900354.1| : TVFDTPITLSHNQIRKLESLIMLDNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEINEKLIKIEGLITSLG : 294
ref|NP_01085550.1| : TVFDSPVLSKTOIDLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 311
ref|XP_005986136.1| : TVFDTPITLSYAOQLLESILWQNKILWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEINIKLIKIEGLITSLG : 278
ref|XP_007432107.1| : TVFDSPITLSYTOINLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 306
ref|XP_006035521.2| : TVFDSPITLSPTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 308
ref|XP_014465858.1| : TVFDSPITLSPTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 308
ref|XP_005293083.1| : TVFDSPITLSPTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 308
ref|XP_006127158.1| : TVFDSPITLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 308
ref|XP_010213863.1| : TVFDAPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 305
ref|XP_005057921.1| : SVFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 307
ref|XP_002187446.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 308
gb|KFO64797.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 283
ref|XP_425745.4| : TIFDSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 306
ref|XP_010721064.1| : TVFDSPITLSHAQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 306
gb|KFW85044.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
ref|XP_013049674.1| : TIFDSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 309
gb|KFQ22427.1| : TVFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
ref|XP_005143337.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 308
gb|KFQ51874.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
gb|KFP87788.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
gb|KFP08430.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
gb|KFP31739.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
gb|EMC79327.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 306
ref|XP_005237901.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 308
gb|KFV72304.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
gb|KFU95365.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
gb|KFU99210.1| : TIFRSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
ref|XP_010076305.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 307
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gb|KFO73096.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
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gb|KFQ66673.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
gb|KFQ93800.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
gb|KFP53434.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282
ref|XP_009323546.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 311
gb|KFM01971.1| : TIFHSPVLSHTQIKLENTLLDWHNKLWNDYRIAQPLNDRVVESSFLPRLGK--GTFQRQDEIEBKLIKIEGLITSLG : 282

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t F Pi LSh Qi LE tl d N tL NDYR aQPln RvveSSF c e l I

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*          340          *          360          *          380          *          400
ref|XP_012726090.1| : DMYLGCH---PRSRHSK-----YHSDLFELVLNFEEDRNTQSYALAHLSHLIDDAFTVCMHVLLK-AGG : 368
ref|XP_007570993.1| : KNMYSGIGGRSSSRHSK-----YHGELFELVLNFEEDRNSVSYALAPL-SRMTDAFTVCMHVLLR-APG : 374
ref|XP_008411549.1| : KNMYSGIGGRSPSRPSK-----YQGELEFELVLNFEEDRNSVSYALAPL-GRMDDAFTVCMHVLLR-APG : 374
ref|XP_004070439.1| : KNLYSG-GNRS-PNPPR-----YHSDLFELVLNFEEDRNTQSYALARLNHPMDDSFTVCMHVLPQ-GPG : 371
emb|CAF93821.1| : KQLYA-----ERTGLEFELVLNFEQHSNDITYALAHVSHPDMAFTVCLHVLPO-DQG : 361
ref|XP_011620264.1| : KYLYAG-GIRGSGPQNK-----NEHTGLEFELVLNFEQNDGGYALAHVSHPIYNAFTICMHVLSK-PEE : 375
ref|XP_013875818.1| : KNMYSG-DV-PGSRPSR-----YDRGGLFELVLNFEVSDNKAISYALTHLTHPMDDAFTVCMHVLLK-VEG : 375
ref|XP_005478239.2| : KNIHSG-GFHN-SRPTR-----YETGSLFELVLNFEQEKSDSYALASLSHPMDDAFTVCMHVLPQ-IEG : 374
ref|XP_006785611.1| : KNIHSG-GFHN-SRPTR-----HETGSLFELVLNFEQEKSDSYTASLSHPMDDAFTVCMHVLPQ-VEG : 374
ref|XP_005914985.1| : KNIHSG-GFHS-SRPTR-----HETGSLFELVLNFEQEKSDSYALASLSHPMDDAFTVCMHVLPQ-VEG : 374
ref|XP_004554282.1| : KNIHSG-GFHS-SRPTR-----HETGSLFELVLNFEQEKSDSYALASLSHPMDDAFTVCMHVLPQ-VEG : 374
ref|XP_005733115.1| : KNIHSG-GFHS-SRPTR-----HETGSLFELVLNFEQEKSDSYALASLSHSMDDAFTVCMHVLPQ-VEG : 374
ref|XP_010739228.1| : KMHSG-GFRN-PRPAT-----YESRGLFELVLNFEQEQAGSYALARLSHPMDSAFTVCMHVLPQ-LKG : 373
ref|XP_008317045.1| : RIVHSG-QQRN-TKASR-----NEPRALFELVFNFEPEKNSGSYALARLSHSMDDAFTVCMHVLPQ-IEG : 374
ref|XP_010793030.1| : KHIHSG-GHNPSPRTR-----LETRALFELVLNFEQEKSGSYALARLGHPELDSFTVCMHVRPQ-LEG : 376
ref|XP_008294025.1| : KNMHSG-GLRN-PRPTR-----YEPRALFELVLNFEQEKAGSYALARLSHPMDDAFTVCMHVLPQ-VEG : 374
ref|XP_002666525.1| : KKAVQG-----KQPISEFELVLYFPQKVESFAVVNLTHPMELKSETACMNVQIP-PIR : 361
ref|XP_009295179.1| : KKAVQA-----SRPSST-----GKQPISEFELVLYFPQKVESFAVVNLTHPMELKSETACMNVQIP-PIR : 369
ref|XP_007246352.1| : KHVYSEA---SGSKP--R-----DKDEAIFELVLNFEENKLGSYAVVNVASHMNLHSETACMNLVYR-PRP : 368
gb|KPP63671.1| : KQVNSG-----ARVITFELVLFQETERRTESYALVHSTHTMQDAFTVCMHVRIV-PGG : 327
ref|XP_012681508.1| : KYIRTSAA--MGDARPTR-----PRALYFELVLNFEETERTGSYALAHLTHPMSIQSETACMGIRTRY-PGE : 340
ref|XP_010902628.1| : KQMHSV-----SRVLSFEMVLNFEPEPTRSYAMAHLTHPMDHSETACMNVKTP-PVG : 361
ref|XP_013989824.1| : KHIRSSA--IGDARPSE-----HEPRAMSEFELVLNFEPESTESYARAHLAHSMDLHSETACMHLRTR-PGW : 372
ref|XP_014002952.1| : KHIISSA--IGDARPSK-----QEPVMSFELVLNFEPEPTRTESYARAHLAHSMDLHSETACMHLRTR-PGE : 372
ref|XP_007900354.1| : LNAEAQA-----GIELASHFELVLFSEGRRESYVEIRTLRSMDLRSESVCMWIRTK-DSR : 348
ref|NP_001085550.1| : KRADSSSKSRL-----LVSGSPSYF-SFYVSKDHLAARVEVRPAESMKMARETICVWVVRTK-NEG : 368
ref|XP_005986136.1| : HMLPNAT-----GNQHSSEF-AFKLEQETTLFVEVTPLWMTMNSLISCMWQNR-NEG : 331
ref|XP_007432107.1| : KYLLDVIKGP-----GHQRSLQ-AFHFPLENTASYVTVIPLKPMQKTETLFCFWVSTQ-NQG : 362
ref|XP_006035521.2| : KHLLGGVHLR-----GAQSSAFPE-AFFPEPADNIESYVNVPRPHVMTLHSETLFCFWIQTQ-NRG : 364
ref|XP_014465858.1| : KHLLGGVHLR-----GAQSSAFPE-AFFPEPADNIESYVNVPRPHVMTLHSETLFCFWIQTQ-NLG : 364
ref|XP_005293083.1| : KHLLAGVGLT-----GLKSSAFPE-AFYFPAENIASYVAVRPLRDMKIQAFTLFCFWIAQ-NRG : 364
ref|XP_006127158.1| : KHLLAGGGMT-----SHKSSAFPE-AFYFPAENIISYVTVRPLRSMQLSFTLFCFWIHAQ-NQG : 364
ref|XP_010213863.1| : KELLDGVSQI-----GVKSSPPE-AFYFPAENIESSVTVQPLHDMQAFTLFCFWARAA-AGG : 361
ref|XP_005057921.1| : TELLNGLSHT-----DTKCSSTPE-AFYFPEVENIESFVEVHPLRAVSQAFTLFCFWSRAQ-PVG : 363
ref|XP_002187446.1| : TELLNGLSHT-----GTKSSSTPE-AFYFPEVENIESFVEVHPLRAVSQAFTLFCFWSRAQ-PVG : 364
gb|KFO64797.1| : TELLNGLSHT-----GTKSSSTPE-AFYFPEVENIESFVEVHPLRAVSQAFTLFCFWSRAQ-PAG : 339
ref|XP_425745.4| : KEFLNGVSHSHT-----GITCSSTPE-AFYFPEMENIESFVEVPRRHEMSQAFTLFCFWTQAQ-HVG : 362
ref|XP_010721064.1| : KEFLNGVSHSHT-----GITSSTPE-AFYFPEMENIESFVEVPRRHEMSQAFTLFCFWTQAQ-HVG : 362
gb|KFW85044.1| : TELLNRGSQA-----GVKPSAFPE-AFYFPEVENIESFVDVHPLRDMQAFTLFCFWARSR-HPG : 338
ref|XP_013049674.1| : KELLNGVSHVGGKKNVYSQVQLTFQTAGFLVISGIKSSSTPE-AFYFPEVENIESFVTVHPLHDMQAFTLFCFWTKAQ-HAG : 387
gb|KFQ22427.1| : RELLSGVSHSHT-----GIKSSSTPE-AFYFPEVENIESLVSIDPLRDMQAFTLFCFWAKAQ-HAG : 338
ref|XP_005143337.1| : RELLNCGSHI--D-----VTAGFLVVSGIKSSSTPE-SFYFPEVENIESFVNIHPLHDMQAFTLFCFWIKAQ-HAG : 374
gb|KFQ51874.1| : RELLNCGVSHV-----GIKSSSTPE-SFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HAG : 338
gb|KFP87788.1| : TELLNCGVSHSHT-----GLKSSSTPE-AFYFPAENIESFVNVHPLQDTSQAFTLFCFWTKAQ-HSG : 338
gb|KFP08430.1| : RELLTGVSHI-----GIKCSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-RAG : 338
gb|KFP31739.1| : TELLTGLSPEM-----GIKSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAH-HAG : 338
gb|EMC79327.1| : SELLKCMSHI-----GIKSSSTPE-AFYFPAENIESFVDIHPLHDMQAFTLFCFWSKAQ-PTG : 362
ref|XP_005237901.1| : REFLNCGVSHI-----GLKSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HAG : 364
gb|KFV72304.1| : RELLNCGVSHSHT-----GLKSSSTPE-AFYFPEVENIESFVTVHPLHDMQAFTLFCFWTKAQ-HDG : 338
gb|KFU95365.1| : RELLNCGVSHI-----GMTSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-SVG : 338
gb|KFU99210.1| : RELLNCGVSHV-----GTKSHTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HAG : 338
ref|XP_010076305.1| : RELLNCGVSHVAGN-----VTA AFLVISGTKSHTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HAG : 375
gb|KFQ39105.1| : RELLNCGVSHI-----GIKSSSTPE-AFYFPEVENIESLVSVHPLHDMQAFTLFCFWTKAQ-HAG : 344
gb|KFW07663.1| : REMLNCGVSHV-----GTKSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HAG : 337
gb|KFO73096.1| : SELLNCRASHI-----GIKSSSTPE-AFYFPEVENIESFVKVHVLHDMQAFTLFCFWTKAQ-HAG : 338
gb|KFV05980.1| : KDLLNCGVSHV-----GIKSSSTPE-AFYFPEVENIESFVTVQPLRDMQAFTLFCFWAKAQ-HAG : 338
gb|KFO89464.1| : RELLNCGVSHV-----GVQSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HAG : 347
gb|KFP34798.1| : KELLNCGVSHI-----DIQSSSTPE-AFYFPAENIESFVDVHPLHDMQAFTLFCFWAKAQ-RAG : 338
gb|KFW93611.1| : RELLNCGVSHI-----GIKSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWAKTQ-HAG : 338
gb|KFP22238.1| : RELLNCGVSHV-----GIKSSAFPE-AFYFPEVENIESFVTVQPLHDMQAFTLFCFWTKAQ-HAG : 338
gb|KFQ78929.1| : RELLNVRRI-----GIKSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-RAG : 338
gb|KFP87033.1| : RELLNGLRHT-----GIQSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HAG : 337
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gb|KFP260550.1| : RELLNCGVSHI-----GIKSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HTG : 338
gb|KFP94842.1| : RELLNCGVSHI-----GIKSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HAG : 338
ref|XP_011583597.1| : RELLNCGVSHI-----GIKSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HAG : 364
gb|KFZ62512.1| : KELLNCASHI-----GIKSSAFPE-AFYFPEVENIESFVNVHPLQDMSQAFTLFCFWTKAQ-HAG : 338
gb|KFO60604.1| : REFLNCGASHI-----GIKSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-PAG : 338
ref|XP_009965819.1| : SKLLNCGVSHIAGN-----VTAGFWLISGIKSSSTPE-AFYFPEVENIESFVYVHPLRDMQAFTLFCFWTKAQ-HAG : 376
gb|KFV47237.1| : RELLNCGVSHI-----GIKSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HSG : 338
gb|KFO11499.1| : RELLNCGVSHSHT-----GIRSSSTPE-AFYFPEVENIESIVNVPRPLHDMQAFTLFCFWTKSQ-HAG : 338
gb|KFQ78854.1| : RELLNCGVSHI-----GIKSSSTPE-AFYFPEVENIESFVNVHPRHDMQAFTLFCFWTKAQ-HAG : 338
gb|KFW11285.1| : RELLNCGVSHI-----GIKSNTEPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWARAA-RAG : 338
gb|KFQ66673.1| : RELLNCGVSHF-----GIKSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HAG : 338
gb|KFQ93800.1| : KELLNCGVSHI-----GIKSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HAG : 338
gb|KFP53434.1| : RELLNCGVSHI-----GIKSSSTPE-AFYFPEVENIESFVKVHPLHDMQAFTLFCFWTKAQ-HAG : 338
ref|XP_009323546.1| : RELLNCGVSHI-----GIKSSSTPE-AFYFPEVENIESFVNVPRPLHDMQAFTLFCFWTKAQ-HAG : 367
gb|KFM01971.1| : RELLNCGVSHI-----GIKSSSTPE-AFYFPEVENIESFVNVHPLHDMQAFTLFCFWTKAQ-HAG : 338

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g fp F n s m l ft C g

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*          420          *          440          *          460          *          480
ref|XP_012726090.1| : VHTVLSYSSGGHNEIMVSIISQDTSAMEVGLWICNEFVNMPHNTKTQDMANYCITWSSSHSGGVDLWINGMVGESRHLQSS : 448
ref|XP_007570993.1| : VHTVLSYSSSIHNEIMLMSISQDANAREVGLWICDDEFVNMPHGFTQDWTNYCVTWSSSHSGGVDLWINGKVGQQRHLQSS : 454
ref|XP_008411549.1| : VHTVLSYSSGIHNEIMVSIISQDANAREVGLWICDDEFVNMPHGFTQDWTNYCVTWSSSHSGGVDLWINGKVGQQRHLQSS : 454
ref|XP_004070439.1| : VHTVLSYSSDGNNEIMLTVSISKDAESGETGLWICNEFVNMPHTFRSQDWTNYCITWSSHTGGADLWINGMVGQQRHLRS : 451
emb|CAF93821.1| : SQTFLSYSTSEHENEVAISISADGDSREVGLWICNEFVNLPHSFKAHVWTNYCVTWSSSQTGGAEVWINGMVGQQRHLKR : 441
ref|XP_011620264.1| : INTVLSYSSSEHNEIITISITEDMNAREVGLWICNAFVNLPHSFRAHDWTNYCVTWSSDLGAEVWINGMVGQQRYLKSG : 455
ref|XP_013875818.1| : SHTVLSYSSHGVDNEIMVSIISQDANAREVGLWICDDEFVNMPHNFMSQDWTNYCVTWSSHTGGAEVWINGKVGQQRHLRS : 455
ref|XP_005478239.2| : VHTVLSYSSSGNNEIMLMSLGEDRDAREVGLWICNEFVNLPHNFKPKDMANYCVTWSSHTGGAEVWINGRVGEQRYLRS : 454
ref|XP_006785611.1| : VHTVLSYSSNGNNEIMLMSLGEDRDAREVGLWICNEFVNLPHNFKPKDMVNYCITWSSHTGGAEVWINGMVGQRYLRRD : 454
ref|XP_005914985.1| : VHTVLSYSSNGNNEIMLMSLGEDRDAREVGLWICNEFVNLPHNFKPKDMVNYCITWSSHTGGAEVWINGMVGQRYLRRD : 454
ref|XP_004554282.1| : VHTVLSYSSNGNNEIMLSLEEGRDAREVGLWICNEFVNLPHNFKPKDMVNYCITWSSHTGGAEVWINGMVGQRYLRRD : 454
ref|XP_005733115.1| : VHTVLSYSSNGNNEIMLSLEEGRDAREVGLWICNEFVNLPHNFKPKDMVNYCITWSSHTGGAEVWINGMVGQRYLRRD : 454
ref|XP_010739228.1| : LHTVLSYSSASNGNNEIMLMSISEDRAKEVGLWICDDEFVNLPHNFRSHDMANYCITWSSNNGVQYIINGMVGQOHLKSG : 453
ref|XP_008317045.1| : IHTVLSYSSASNSNEIMLMSI CEDRDGKEVGLWICNEFVNLPHNFKSRDMANYCVTWSSHTGGAEVWINGMVGQRYLQSG : 454
ref|XP_010793030.1| : VHTVLSYSSNGNNEIMLMSIIVEDRDSREVGLWICNEFVNLPHNFKSHKWMANYCITWSSHTGGAEVWINGMVGQRYLKN : 456
ref|XP_008294025.1| : IHTVLSYSSNGNNEIMLMSI CEDRDSKEVGLWICNEFVNLPHNFKSHDMANYCITWSSHTGGAEVWINGMVGQRYLKS : 454
ref|XP_002666525.1| : DLTFLSYST-SHDNEIMLSL-----SEVGLWICDEFVNLSFDLPSSDWTNYCLTWASHNGGAEVWINGVGVKERYIRT : 435
ref|XP_009295179.1| : DLTFLSYST-SHDNEIMLSL-----SEVGLWICDEFVNLSFDLPSSDWTNYCLTWASHNGGAEVWINGVGVKERYIRT : 443
ref|XP_007246352.1| : VHTVLSYSSSGNNEIMLTIITM-----HEIHLWICNEFVNLPHNHHAHSMANYCVTWASHHTGGAEVWINGVGVGEQYLRA : 443
gb|KPP63671.1| : VHTVLSYSTSTNDNEIMLVISV-----YEVGLWICNAFLNPLDQSTEWVNYCLTWASHHTGGAEVWINGVGVGEQYLQ : 402
ref|XP_012681508.1| : AHTVLSYSTPAHDNEIMLVITM-----QDVLWICNEFVSLPHDLRAFNMANYCMTWASHHTGGAEVWINGMVGEEQYLRA : 415
ref|XP_010902628.1| : IHTVLSYSSQGNNEIMLMSI-----YEVGLWICNEFVNLPHNFHSHEMANYCVTWSSSHSGGADLWINGLVGEEQYIR : 436
ref|XP_013989624.1| : VHTVLSYSSQGNNEIMLTIITM-----YEVGLWICNEFVNLPHNFHSRDMANYCVTWSSSHSGGAEVWINGVGVGEQYLQ : 447
ref|XP_014002952.1| : IHTVLSYSSQGNNEIMLTIITM-----YEVGLWICNEFVNLPHNFHSRDMANYCVTWSSSHSGGAEVWINGVGVGEQYLQ : 447
ref|XP_007900354.1| : SKILLSYATKGSNEIMLVISV-----LDWGLWICGHFVNIGFHFNSKDWVHYCLTWRSQSGSAEMWINGLGSKEKRIKR : 423
ref|NP_001085550.1| : SQTFLSYSTNNRNEIMLVISV-----NDIYGLWICGFIFINFINIHTSEDVHYCVSWDSQNGAAKLWVSLPKERTIQH : 443
ref|XP_005986136.1| : TKAFVSYAMFETDNEIMLVITV-----SDVGLWICGYFVSFLPHHRTEDVWYCVTWTSNTGLAEVWINGVGVKGLIKK : 406
ref|XP_007432107.1| : RQTVLSYSTPESNEIMLVITV-----MAVGLWICGFVQVLDLHRAEDVWVHYCVTWLSSSGTINLWINGAVGREKHLQR : 437
ref|XP_006035521.2| : SQTFLSYSTPESNEIMLVITV-----SDVGLWICGHFINFLHHRSEEWLHYCVSWTSHSGTADLWINGAVGREKSIQK : 439
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tv sYs dnEl g vglwig f p W yC W S G a lw nG g g

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ref|XP_010902628.1| : DYR P----- : 521
ref|XP_013989824.1| : DYR H----- : 532
ref|XP_014002952.1| : DYR H----- : 532
ref|XP_007900354.1| : DNS LG----- : 507
ref|NP_001085550.1| : DNS C----- : 525
ref|XP_005986136.1| : DSS K----- : 488
ref|XP_007432107.1| : DTS R----- : 520
ref|XP_006035521.2| : DSS H----- : 522
ref|XP_014465858.1| : DSS H----- : 522
ref|XP_005293083.1| : DPS Q----- : 522
ref|XP_006127158.1| : DPS R----- : 522
ref|XP_010213863.1| : DTS E----- : 519
ref|XP_005057921.1| : DTS H----- : 520
ref|XP_002187446.1| : DTS Q----- : 522
gb|KFO64797.1| : DTS C----- : 496
ref|XP_425745.4| : DTS Q----- : 520
ref|XP_010721064.1| : DTS Q----- : 520
gb|KFW85044.1| : DTS C----- : 495
ref|XP_013049674.1| : DTS Q----- : 545
gb|KFQ22427.1| : DTS C----- : 495
ref|XP_005143337.1| : DTS Q----- : 532
gb|KFQ51874.1| : DTS C----- : 495
gb|KFP87788.1| : DTS C----- : 495
gb|KFP08430.1| : DTS C----- : 495
gb|KFP31739.1| : DTS C----- : 495
gb|EMC79327.1| : DTS Q----- : 520
ref|XP_005237901.1| : DTS Q----- : 522
gb|KFV72304.1| : DTS C----- : 495
gb|KFU95365.1| : DTS C----- : 495
gb|KFU99210.1| : DTS C----- : 495
ref|XP_010076305.1| : DTS Q----- : 533
gb|KFQ39105.1| : DTS C----- : 501
gb|KFW07663.1| : DTS C----- : 494
gb|KFO73096.1| : DTS C----- : 495
gb|KFV05980.1| : DTS C----- : 495
gb|KFO89464.1| : DTS C----- : 504
gb|KFP34798.1| : DTS C----- : 495
gb|KFW93611.1| : DTS C----- : 495
gb|KFP22238.1| : DTS C----- : 495
gb|KFQ78929.1| : DTS C----- : 495
gb|KFP87033.1| : DTS C----- : 494
gb|KGL96941.1| : DTS C----- : 495
gb|KFZ60550.1| : DTS C----- : 495
gb|KFP94842.1| : DTS C----- : 495
ref|XP_011583597.1| : DSS Q----- : 522
gb|KFZ62512.1| : DTS C----- : 494
gb|KFQ06064.1| : DTS C----- : 495
ref|XP_009965819.1| : DTS Q----- : 534
gb|KFV47237.1| : DTS C----- : 495
gb|KFO11499.1| : DTS C----- : 495
gb|KFQ78854.1| : DTS C----- : 495
gb|KFW11285.1| : DTS C----- : 495
gb|KFQ66673.1| : DTS C----- : 495
gb|KFQ93800.1| : DTS C----- : 495
gb|KFP53434.1| : DTS C----- : 495
ref|XP_009323546.1| : DTS Q----- : 525
gb|KFM01971.1| : DTS C----- : 495

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