

	1	10	20	30	40
QUERY	VWEFYMP	TDFVF	FGEKIL	EKRGN	ILIDLLGKRALVVTGKSSS
UniRef90_H1XT08	MYSYFM	PTVNL	MGAAGAV	AEVGNQV	KLLGGSKALVVTGDKPL
UniRef90_F6B7G5	VYGYF	PTVNL	MGVIG	SAHKEV	PNQVVKTLGTNVLVITDADF
UniRef90_C8W2N3	VYGYF	PTVNL	MGVIG	SAHKEV	PNQVVKTLGTNVLVITDADF
UniRef90_K2FCD5		YFMP	PTVNL	MGVIG	SAHKEV
UniRef90_I7LG21		YRFF	MPV	SVNLM	GVIGCL
UniRef90_T0IJ33		FGYFN	MPV	SVNLM	GVIGCL
UniRef90_S6HGX2		TFF	PTSV	NLM	GVIGCL
UniRef90_L0M0D9		TFF	PTSV	NLM	GVIGCL
UniRef90_UPI0003B7861F		YMFQS	PAR	IHF	GRGAV
UniRef90_C8WZM6	VY	GFF	PTSV	NLM	GVIGCL
UniRef90_A0A010T027		TFF	PTSV	NLM	GVIGCL
UniRef90_UPI00037A7146		TFF	PTSV	NLM	GVIGCL
UniRef90_I4D757	IY	GYY	MP	PTVNL	MGAAGAV
UniRef90_V5PMC5		TFF	PTSV	NLM	GVIGCL
UniRef90_G1UVY3		SFF	PTSV	NLM	GVIGCL
UniRef90_D8GT35		FQ	CK	KI	Y
UniRef90_Q09669		FY	PTSV	NLM	GVIGCL
UniRef90_T4VB81		YAF	MP	PTSV	NLM
UniRef90_Q2SW43		SFF	PTSV	NLM	GVIGCL
UniRef90_UPI00035D4E91		KFM	MP	PTSV	NLM
UniRef90_C6LCY6		FTF	SV	QNI	I
UniRef90_H7EJE5					
UniRef90_G4CJ39					
UniRef90_UPI000287DD83	V	SQFF	MP	TR	N
UniRef90_R5JEB0	I	N	R	F	I
UniRef90_Q6APP3	V	Y	G	Y	F
UniRef90_UPI000475EC86					
UniRef90_K5XZF8					
UniRef90_R6MYU6					
UniRef90_Q217B4					
UniRef90_M5AGB9					
UniRef90_A3QC38					
UniRef90_D6YQH2					
UniRef90_UPI000361D274					
UniRef90_UPI0001E2E707					
UniRef90_C7RHX6					
UniRef90_UPI00047D242D					
UniRef90_F7NII6					
UniRef90_A7ML35					
UniRef90_D9TMP1					
UniRef90_Q03HE9					
UniRef90_UPI0002F6B320					
UniRef90_C4XP10					
UniRef90_F9RC81					
UniRef90_A9WJG6					
UniRef90_R5EWY4					
UniRef90_A0A037Z662					
UniRef90_L1Q2G5					
UniRef90_V6Q5Y5					
UniRef90_S0KDZ9					
UniRef90_T3G796					
UniRef90_Q39WT8					
UniRef90_UPI000380C97D					
UniRef90_UPI0003625EB3					
UniRef90_Q898N7					
UniRef90_UPI00047B3768					
UniRef90_UPI0002D7C575					
UniRef90_R5GMR0					
UniRef90_K6DGF2					
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UniRef90_A0A024EJX3					
UniRef90_UPI00037E1F7F					
UniRef90_G8PVZ2					
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UniRef90_W7CAP0					
UniRef90_Q6APG1					
UniRef90_L5N2I6					
UniRef90_I7KSS4					
UniRef90_K8WCG8					
UniRef90_D9PXK7					
UniRef90_UPI000442372E					
UniRef90_U4ZC36					
UniRef90_UPI00036A2BB5					
UniRef90_R5MHU9					
UniRef90_A0A017RVC0					
UniRef90_R6IBT3					
UniRef90_W6N5M0					
UniRef90_F9DQT8					
UniRef90_A4XPC2					
UniRef90_C4U860					
UniRef90_E3HCL0					
UniRef90_B2TPH6					
UniRef90_U1WIU7					
UniRef90_V9H441					
UniRef90_UPI0002897D5F					
UniRef90_X1RZF8					
UniRef90_W6KPN2					

QUERY	K	K	N	G	S	L	D	L	K	K	L	L	D	E	T	E	I	V	S	Y	E	I	F	D	E	V	E	P	S	F	D	N	V	M	K	A	V	E						
UniRef90_H1XT08	I	G	A	G	I	L	D	E	T	K	K	L	D	D	E	G	V	I	K	Y	V	I	F	D	G	A	E	P	N	P	T	V	D	N	D	E	V	A						
UniRef90_F6B7G5	R	P	G	M	A	E	D	K	A	M	L	V	D	D	A	G	A	K	V	T	I	Y	F	A	G	E	P	N	P	T	D	I	N	V	D	E	G	L	K					
UniRef90_C8W2N3	N	K	M	G	M	A	E	Q	I	K	A	Q	V	V	E	A	G	A	S	A	V	I	Y	D	G	A	E	P	N	P	T	D	K	N	V	H	D	E	G	L	K			
UniRef90_K2FCD5	S	S	V	I	T	P	E	L	I	K	G	Y	I	E	D	A	G	F	S	A	V	I	W	D	N	T	K	A	N	P	T	D	V	I	N	V	H	D	E	G	L	K		
UniRef90_I7LG21	V	E	I	G	L	L	K	R	L	T	T	I	L	D	E	E	A	F	E	Y	V	I	W	D	E	T	K	A	N	P	T	T	V	K	N	V	H	D	E	G	L	K		
UniRef90_T0IJ33	V	E	I	K	L	I	K	K	L	T	D	V	L	D	K	I	Q	G	V	S	I	F	D	D	G	A	K	P	N	P	T	T	V	G	N	V	H	D	E	G	L	K		
UniRef90_S6HGX2	A	K	T	G	L	A	A	Q	I	A	G	L	I	V	K	I	Q	G	I	D	S	V	F	D	G	A	K	P	N	P	T	T	V	S	N	V	H	D	E	G	L	K		
UniRef90_L0M0D9	N	K	L	G	M	A	G	D	V	Q	K	G	L	A	E	R	D	I	F	A	S	V	Y	D	G	V	Q	S	P	N	P	T	T	A	N	V	H	D	E	G	L	K		
UniRef90_UPI0003B7861F	A	R	T	G	S	L	D	A	V	A	A	S	L	K	A	A	G	V	A	A	T	V	Y	A	D	G	V	E	S	P	N	P	T	V	N	V	H	D	E	G	L	K		
UniRef90_C8WZM6	T	K	A	G	I	S	Q	O	I	A	D	L	I	K	K	A	N	G	M	E	C	A	Y	A	D	E	T	I	P	N	P	T	D	N	V	H	D	E	G	L	K			
UniRef90_A0A010T027	A	K	A	G	V	A	G	L	I	A	D	K	L	A	M	Q	D	I	D	S	V	I	F	D	G	A	K	P	N	P	T	I	A	N	V	H	D	E	G	L	K			
UniRef90_UPI000037A7146	S	S	I	L	G	M	V	K	Q	V	S	D	L	A	A	S	E	G	V	K	T	V	F	D	G	T	A	K	P	N	P	T	I	G	N	V	H	D	E	G	L	K		
UniRef90_I4D757	E	K	I	G	M	A	G	K	E	I	A	D	V	I	T	K	E	S	E	L	V	V	I	F	D	G	A	E	P	N	P	T	T	D	K	N	V	H	D	E	G	L	K	
UniRef90_V5PMC5	A	R	A	G	V	A	D	K	V	A	G	L	L	A	R	E	D	I	Q	S	V	V	F	D	G	A	K	P	N	P	T	T	V	S	N	V	H	D	E	G	L	K		
UniRef90_G1UUV3	V	K	A	G	I	L	K	Q	I	T	D	L	I	D	N	A	K	M	P	Y	A	V	F	D	Q	T	V	I	P	N	P	T	Q	V	D	K	N	V	H	D	E	G	L	K
UniRef90_D8GT35	K	K	T	G	A	L	D	K	V	Y	S	L	K	D	N	Q	G	I	D	P	V	I	F	N	K	V	E	S	D	P	S	V	L	T	V	N	V	H	D	E	G	L	K	
UniRef90_Q09669	I	K	V	G	L	Y	D	K	V	K	A	L	L	E	E	Q	S	I	T	V	H	L	Y	D	G	V	Q	P	N	P	T	T	V	G	S	N	V	H	D	E	G</			

QUERY	90	100	110	120
UniRef90_H1XT08	L	P	V	L
UniRef90_F6B7G5	V	S	G	H
UniRef90_C8W2N3	V	S	G	H
UniRef90_K2FCD5	A	P	K	N
UniRef90_I7LG21	M	P	K	N
UniRef90_T0IJ33	L	P	K	N
UniRef90_S6HGX2	M	P	K	N
UniRef90_L0M0D9	L	P	K	N
UniRef90_UPI0003B7861F	L	P	K	N
UniRef90_C8WZM6	L	P	K	N
UniRef90_A0A010T027	L	P	K	N
UniRef90_UPI00037A7146	L	P	K	N
UniRef90_I4D757	L	P	K	N
UniRef90_V5PMC5	M	P	K	N
UniRef90_G1UVY3	V	S	G	H
UniRef90_D8GT35	A	P	K	N
UniRef90_Q09669	I	V	K	K
UniRef90_T4VB81	L	P	K	N
UniRef90_Q2SW43	R	F	Q	R
UniRef90_UPI00035D4E91	A	Y	T	D
UniRef90_C6LCY6	A	F	R	S
UniRef90_H7EJE5	A	C	K	K
UniRef90_G4CJ39	V	L	K	E
UniRef90_UPI000287DD83	M	M	R	E
UniRef90_R5JEB0	A	F	A	S
UniRef90_Q6APP3	A	Y	S	K
UniRef90_UPI000475EC86	M	L	N	R
UniRef90_K5XZF8	A	Y	A	A
UniRef90_R6MYU6	A	M	Q	E
UniRef90_Q217B4	Q	L	Q	A
UniRef90_M5AGB9	L	Y	E	S
UniRef90_A3QC38	L	L	K	A
UniRef90_D6YQH2	V	F	R	E
UniRef90_UPI000361D274	A	C	K	A
UniRef90_UPI0001E2E707	I	Y	R	N
UniRef90_C7RHX6	R	M	E	K
UniRef90_UPI00047D242D	A	A	K	A
UniRef90_F7NII6	L	I	K	E
UniRef90_A7ML35	M	L	R	A
UniRef90_D9TMP1	I	M	N	S
UniRef90_Q03HE9	V	Y	L	D
UniRef90_UPI0002F6B320	L	Y	E	K
UniRef90_C4XP10	L	Y	K	S
UniRef90_F9RC81	Q	L	K	A
UniRef90_A9WJG6	T	F	R	E
UniRef90_R5EWY4	A	A	V	A
UniRef90_A0A037Z662	V	M	R	E
UniRef90_L1Q2G5	V	M	R	E
UniRef90_V6Q5Y5	I	Y	E	A
UniRef90_S0KDZ9	L	Y	Q	S
UniRef90_T3G796	I	L	K	S
UniRef90_Q39WT8	V	Y	Q	E
UniRef90_UPI000380C97D	V	Y	I	N
UniRef90_UPI0003625EB3	K	F	K	E
UniRef90_Q898N7	V	C	K	E
UniRef90_UPI00047B3768	I	M	R	D
UniRef90_UPI0002D7C575	A	Y	Q	Q
UniRef90_R5GMR0	F	A	K	A
UniRef90_K6DGF2	Y	L	K	E
UniRef90_Q6D977	H	F	K	A
UniRef90_UPI00041F5919	I	L	N	D
UniRef90_G7HPN4	F	L	K	E
UniRef90_U2KWY6	A	F	Q	A
UniRef90_F0QZC4	A	Y	K	A
UniRef90_A0A024EJX3	F	L	K	N
UniRef90_UPI00037E1F7F	V	Y	E	Q
UniRef90_G8PVZ2	A	F	K	A
UniRef90_S0S5H0	A	C	Q	A
UniRef90_W7CAP0	A	V	K	A
UniRef90_Q6APG1	A	Y	V	A
UniRef90_L5N2I6	E	V	N	D
UniRef90_I7KSS4	L	M	K	S
UniRef90_K8WCG8	H	F	K	Q
UniRef90_D9PXK7	V	F	D	A
UniRef90_UPI000442372E	A	Y	N	E
UniRef90_U4ZC36	I	Y	S	K
UniRef90_UPI00036A2BB5	A	F	K	R
UniRef90_R5MHU9	A	A	K	K
UniRef90_A0A017RVC0	Q	M	R	N
UniRef90_R6IBT3	A	F	K	A
UniRef90_W6N5M0	L	A	V	Q
UniRef90_F9DQT8	V	Y	R	D
UniRef90_A4XPC2	K	V	R	Q
UniRef90_C4U860	A	F	K	Q
UniRef90_E3HCL0	E	M	A	E
UniRef90_B2TPH6	T	V	K	A
UniRef90_U1WIU7	R	Y	R	A
UniRef90_V9H441	E	M	L	D
UniRef90_UPI0002897D5F	I	C	R	E
UniRef90_X1RZF8	L	A	K	E
UniRef90_W6KPN2	M	L	S	E

QUERY	R	K	S	T	P	P	S	D	A	L	A	I	E	A	M	K	I	I	H	R	N	L	P	K	A	I	E	G	N	R	E	A	R	K	K	M	F	V	A	S				
UniRef90_H1XT08	T	I	A	T	P	V	T	D	S	A	A	L	K	A	M	K	E	L	I	G	Q	E	N	L	R	P	A	N	G	D	N	M	E	A	R	D	K	K	M	A	Y	A	E	
UniRef90_F6B7G5	T	I	A	T	P	V	T	D	S	A	A	L	K	A	M	K	E	L	I	S	E	N	L	R	R	N	A	N	G	Q	N	M	E	A	R	D	K	K	M	A	Y	A	E	
UniRef90_C8W2N3	I	I	A	T	P	V	T	D	S	A	A	L	K	A	M	K	E	L	I	S	E	N	L	R	R	N	A	N	G	Q	N	M	E	A	R	D	K	K	M	A	Y	A	E	
UniRef90_K2FCD5	T	I	A	T	P	V	T	D	C	A	A	L	V	K	A	I	E	L	I	S	K	W	L	R	E	A	N	G	N	G	N	D	I	E	A	R	E	D	K	M	T	Y	A	E
UniRef90_I7LG21	T	D	A	T	P	A	T	D	A	A	A	L	M	A	I	E	L	I	I	F	K	Y	L	K	R	E	N	G	N	D	I	E	A	R	E	D	K	M	T	Y	A	E		
UniRef90_T0IJ33	I	I	A	T	P	V	T	D	C	A	A	L	I	K	A	I	E	L	I	S	G	F	L	R	R	K	D	G	K	D	I	E	A	R	E	N	M	T	Y	A	E			
UniRef90_S6HGX2	T	A	A	T	P	I	T	D	A	C	A	L	K	A	M	T	E	L	I	A	D	N	L	H	K	A	V	V	D	G	S	D	A	R	E	N	M	T	Y	A	Q			
UniRef90_L0MOD9	I	A	A	T	P	I	T	D	A	C	A	L	K	A	I	T	M	I	I	A	E	N	V	A	V	A	D	G	A	N	A	E	A	R	E	N	M	A	Y	A	Q			
UniRef90_UPI0003B7861F	K	I	A	T	P	M	T	D	V	H	A	L	E	A	I	R	L	I	I	G	E	N	K	A	V	H	G	P	G	E	N	M	Q	A	R	E	N	M	A	L	R	G	Q	
UniRef90_C8W2M6	L	A	A	N	P	I	T	D	A	C	A	L	Q	A	I	E	Q	L	I	A	K	Y	L	R	P	A	V	A	D	G	S	D	M	I	A	R	E	N	M	A	F	A	Q	
UniRef90_A0A01M0207	T	A	A	N	P	I	T	D	A	C	A	L	K	A	I	E	L	I	I	S	R	N	L	R	V	H	D	G	S	D	M	I	A	R	E	N	M	A	Y	A	Q			
UniRef90_UPI0003A7A146	I	A	A	T	P	I	T	D	A	V	A	L	I	K	A	I	E	L	I	Q	Q	S	L	R	T	K	D	G	Q	S	I	E	A	R	E	Q	M	A	Y	A	Q			
UniRef90_I4D757	T	I	A	T	P	V	T	D	S	A	A	L	M	A	F	K	L	I	I	S	K	Y	L	R	R	A	N	G	E	D	I	E	A	R	E	Q	M	A	Y	A	Q			
UniRef90_V5PMC5	T	A	A	T	P	I	T	D	A	C	A	L	K	A	V	E	T	L	I	S	Q	N	L	R	R	S	H	G	D	D	M	A	R	E	N	M	A	Y	A	Q				
UniRef90_G1UUVY3	T	A	A	T	P	M	T	D	A	C	A	E	K	A	I	E	Y	I	I	N	R	Y	L	R	R	A	N	G	E	D	K	E	A	R	E	N	M	A	C	Y	A	Q		
UniRef90_D8GT35	K	A	A	Q	P	M	S	D	T	F	A	I	K	A	I	K	I	I	I	S	N	I	S	R	S	V	L	K	G	D	I	E	A	R	E	K	M	L	L	G	Q			
UniRef90_Q09669	T	A	A	N	P	I	T	D	A	C	A	V	K	C	A	I	E	L	V	N	K	Y	L	K	R	D	N	G	K	D	E	E	A											

QUERY	C	L	A	G	M	V	I	A	Q	T	G	T	L	A	H	A	L	G	Y	P	L	T	T	E	K	G	I	K	H	G	K	A	T	G	M	V	L	P	F		
UniRef90_H1XT08	F	L	A	G	M	A	F	N	N	A	S	L	G	Y	V	H	A	M	A	H	Q	L	G	G	F	F	Y	D	L	P	H	G	V	C	N	A	I	L	L	P	H
UniRef90_F6B7G5	F	L	A	G	M	A	F	N	N	A	S	L	G	Y	V	H	A	M	A	H	Q	L	G	G	F	F	Y	N	L	P	H	G	V	C	N	A	I	L	L	P	H
UniRef90_C8W2N3	F	L	A	G	M	A	F	N	N	A	S	L	G	Y	V	H	A	M	A	H	Q	L	G	G	F	F	Y	N	L	P	H	G	V	C	N	A	I	L	L	P	H
UniRef90_K2FCD5	L	L	A	G	M	A	F	N	N	A	S	L	G	Y	V	H	A	M	A	H	Q	L	G	G	F	F	Y	D	L	P	H	G	V	C	N	A	I	L	L	P	H
UniRef90_I7LG21	Y	L	A	G	V	A	F	N	N	A	S	L	G	Y	V	H	A	M	A	H	Q	L	G	G	F	F	Y	D	L	P	H	G	V	C	N	A	I	L	L	P	H
UniRef90_T0IJ33	Y	L	A	G	I	A	F	N	N	A	S	L	G	Y	V	H	A	M	A	H	Q	L	G	G	F	F	Y	D	L	P	H	G	V	C	N	A	I	L	L	P	A
UniRef90_S6HGX2	F	L	A	G	M	A	F	N	N	A	S	L	G	Y	V	H	A	M	A	H	Q	L	G	G	F	F	Y	D	L	P	H	G	V	C	N	A	I	L	L	P	A
UniRef90_L0MOD9	F	L	A	G	M	A	F	N	N	A	S	L	G	Y	V	H	A	M	A	H	Q	L	G	G	F	F	Y	D	L	P	H	G	V	C	N	A	I	L	L	P	H
UniRef90_UPI0003B7861F	M	H	A	G	L	A	F	S	N	A	S	V	A	L	V	H	A	M	S	R	P	L	G	A	L	F	G	I	P	H	G	Q	A	N	A	M	L	P	V		
UniRef90_C8WZM6	Y	L	A	G	M	A	F	N	N	A	S	L	G	H	V	H	A	M	A	H	Q	L	G	G	F	F	Y	D	L	P	H	G	E	C	N	A	I	L	L	P	H
UniRef90_A0A01M0T27	F	L	A	G	M	A	F	N	N	A	S	L	G	F	V	H	A	M	A	H	Q	L	G	G	F	F	Y	D	L	P	H	G	V	C	N	A	I	L	L	P	H
UniRef90_UPI0003A7146	F	M	A	G	M	A	F	N	N	A	S	L	G	Y	V	H	A	M	A	H	Q	L	G	G	F	F	Y	D	L	P	H	G	V	C	N	A	I	L	L	P	H
UniRef90_I4D757	L	L	A	G	M	A	F	N	N	A	S	L	G	Y	V	H	A	M	A	H	Q	L	G	G	F	F	Y	N	L	P	H	G	V	C	N	A	I	L	L	P	H
UniRef90_V5PMC5	F	L	A	G	M	A	F	N	N	A	S	L	G	Y	V	H	A	M	A	H	Q	L	G	G	F	F	Y	D	L	P	H	G	V	C	N	A	I	L	L	P	H
UniRef90_G1UYV3	Y	L	A	G	M	A	F	N	N	A	S	L	G	H	V	H	A	M	A	H	Q	L	G	G	F	F	Y	D	L	P	H	G	E	C	N	A	I	L	L	P	H
UniRef90_D8GT35	M	Y	A	G	L	A	F	S	N	A	S	T	A	L	V	H	S	M	S	R	P	L	G	A	Y	Y	K	V	P	H	G	M	A	I	L	L	T	E	H		
UniRef90_Q09669	F	L	G	G	M	A	F	N	N	A	S	L	G	Y	V	H	A	M	A	H	Q	L	G	G	F	F	Y	G	I	P	H	G	V	C	N	A	I	L	L	A	H
UniRef90_T4VB81	Y	L	A	G	M	A</																																			

	1	10	20	30	40																																				
UniRef90_A0A017HPN4	N	W	S	Y	P	T	R	V	L	F	G	P	G	R	I	K	E	L	A	A	C	A	E	A	G	I	A	R	P	L	L	V	T	D	R	G	L				
UniRef90_X2H2S9								Y	F	G	A	G	S	G	I	V	N	I	V	D	E	V	K	K	R	G	F	K	K	A	L	V	V	T	D	G	D	L			
UniRef90_L5MVR9	F	V	Y	Y	N	P	T	Q	L	I	F	G	A	G	S	Q	L	A	Q	L	V	E	E	K	A	K	Q	L	G	N	T	K	V	L	V	Y	G	D	K	S	I
UniRef90_V7I205	M	L	W	F	R	V	P	E	K	I	Y	F	G	K	S	G	A	I	G	T	A	L	L	E	V	L	K	G	M	K	K	A	F	I	V	T	D	K	V	L	
UniRef90_D6SP33	F	D	L	Y	C	P	T	K	I	K	F	G	A	G	I	T	A	E	A	G	V	E	V	K	A	L	N	C	S	K	V	L	V	V	A	D	P	G	V		
UniRef90_E3DM49	M	K	S	F	L	I	P	R	E	I	H	F	E	E	G	A	L	D	Y	L	S	T	L					D	A	K	K	A	A	I	V	T	D	E	G	V	M
UniRef90_UPI0003F5012D	F	V	F	H	N	P	T	K	L	I	F	G	K	E	Q	L	D	Q	A	L	K	T	E	I	P	A	S	K	A	K	V	L	V	Y	G	G	S	I			
UniRef90_T4VDU0	M	L	W	F	R	A	P	E	K	V	Y	F	G	K	G	C	L	G	V	A	L	Q	E	L	K	H	S	L	K	K	E	R	A	F	I	V	T	D	G	F	L
UniRef90_N4WJTJ4	F	A	F	Y	N	P	T	K	L	Y	F	G	S	D	Q	I	E	Q	L	K	H	E	I	E	Q	Y	G	Q	N	I	L	M	V	Y	G	G	S	I			
UniRef90_R6T0L7	F	N	Y	Y	L	P	V	N	I	V	F	G	R	G	K	V	S	S	V	G	I	A	S	D	H	G	K	K	A	L	V	V	T	G	K	S	T				
UniRef90_UPI00036E03EC	N	W	S	Y	P	T	A	V	R	F	G	A	G	R	I	K	E	L	A	A	V	V	K	L	A	G	M	K	R	P	L	L	V	T	D	P	G	L			
UniRef90_H5V1M8	F	L	L	A	L	P	K	I	S	L	H	G	A	G	A	I	G	D	M	V	K	L	I	A	G	K	K	W	G	K	A	L	I	V	T	D	G	S	I		
UniRef90_UPI00037DE0C8	F	G	F	S	V	P	R	D	I	V	F	G	E	N	S	L	E	K	L	A	T	L					K	G	K	R	A	A	L	V	T	G	G	S	M		
UniRef90_A0A052JF42	V	S	S	F	A	C	P	R	D	I	V	F	G	S	D	A	H	Q	Q	L	P	A	L	V	A	A	G	G	A	Q	R	V	F	L	V	V	D	P	A	L	
UniRef90_Q1QZR6	N	W	T	Y	P	T	A	I	R	F	G	A	G	R	I	K	E	L	P	A	A	C	A	E	A	G	I	T	R	P	L	V	T	D	R	G	L				
UniRef90_R6W5S8	M	P	R	F	T	L	P	R	D	I	Y	F	G	E	N	S	L	K	I	L	K	T	L				R	G	K	R	A	V	I	V	T	G	G	S	M		
UniRef90_R7XRNP	K	F	H	A	P	E	V	V	F	G	A	D	S	L	G	E	A	G	F	A	A	I	R	L	G	A	R	R	P	F	L	V	T	D	P	G	I				
UniRef90_C2U1C0	F	V	F	R	N	P	T	K	L	I	F	G	K	G	Q	L	E	Q	L	K	T	E	I	P	Q	F	G	K	K	V	L	L	V	Y	G	G	S	I			
UniRef90_R5J2S8											Y	F	G	W	G	A	R	E	E	L	V	P	E	I	K	K	R	H	F	K	V	L	L	V	T						

[illegible]

UniRef90_A0A017HPN4	A	F	R	E	G	G	S	D	G	V	L	G	L	R	R	G	S	G	L	D	L	G	K	M	V	A	F	M	S	A	Q	T	R	P	V	W	D	D	W	W			
UniRef90_X2H2S9	L	F	R	T	E	S	G	A	D	Y	L	L	I	A	V	G	G	G	S	V	I	D	A	K	A	V	A	V	I	N	N	Y	E	D	V	R	S	L	E	G			
UniRef90_L5MVR9	L	C	R	Q	E	S	G	A	D	Y	L	L	I	A	V	G	G	G	S	V	I	D	A	K	A	V	A	V	I	N	N	Y	E	D	V	R	S	L	E	G			
UniRef90_V7I205	E	M	R	N	F	E	N	P	D	V	L	L	I	A	V	G	G	G	S	P	M	D	A	A	K	I	M	W	T	M	Y	E	H	P	E	M	D	I	R	K	R	I	Y
UniRef90_D6SP33	L	Q	K	S	E	Q	C	D	I	M	L	L	V	A	V	G	G	G	S	T	M	D	T	G	K	G	V	G	C	L	A	T	H	E	G	P	L	P	A	Y	E	G	
UniRef90_E3DM49	D	M	L	E	F	E	P	D	L	V	V	L	A	L	V	G	G	G	S	T	M	D	A	A	K	I	M	W	A	F	Y	E	H	P	E	D	L	E	F	E	D	I	I
UniRef90_UPI00037F5012D	I	A	K	D	E	N	I	D	F	L	L	A	V	A	V	G	G	G	S	V	I	D	A	T	K	T	I	A	A	G	A	K	Y	D	G	D	A	W	D	L	V	T	
UniRef90_T4VU0	A	M	A	D	F	E	N	P	D	V	L	L	I	A	V	G	G	G	S	A	M	D	A	G	K	I	M	W	T	M	Y	E	H	P	E	D	I	D	F	G	D	V	Y
UniRef90_N4WJTJ4	L	C	K	S	E	N	P	D	F	L	L	A	V	A	V	G	G	G	S	T	I	D	C	T	K	A	I	A	A	G	A	V	T	D	A	D	I	W	D	L	V	T	
UniRef90_R6T0L7	I	A	K	D	N	G	C	D	M	V	L	A	V	G	V	G	G	G	S	V	M	D	C	A	K	A	A	A	F	I	A	V	T	D	G	D	I	N	D	Y	L	F	
UniRef90_UPI00036E03EC	A	Y	K	A	G	G	H	D	G	V	I	A	V	A	V	G	G	G	S	G	L	D	A	G	K	L	I	A	F	M	S	G	N	T	R	P	L	W	D	D	W	Y	
UniRef90_H5V1M8	A	F	R	E	A	G	C	D	Y	L	I	A	F	A	V	G	G	G	S	P	I	D	T	A	K	A	V	K	I	L	T	A	N	P	G	P	S	T	A	Y	S	G	
UniRef90_UPI00037DE0C8	A	M	Q	D	F	Q	P	D	W	I	V	A	I	A	V	G	G	G	S	S	A	L	D	A	A	K	V	M	W	C	F	Y	E	H	P	N	L	T	F	E	D	I	V
UniRef90_A0A025JF42	R	C	R	S	H	G	G	O	A	I	L	A	V	G	G	G	S	T	I	D	V	A	K	S	V	A	I	L	M	T	N	G	G	R	I	A	D	Y	E	G			
UniRef90_Q1QZR6	A	F	R	A	G	G	H	D	G	V	V	A	F	A	V	G	G	G	S	G	L	D	L	G	K	M	V	A	F	M	P	V	W	D	F	E	D	I	D	D	W	W	
UniRef90_R6W5S8	R	M	A	E	F	E	P	D	W	I	V	A	A	V	G	G	G	S	P	I	D	A	A	K	A	M	W	T	F	Y	E	Y	P	F	D	E	L	C	K	P	F		
UniRef90_R7XRP9	L	Y	A	E	Q	E	C	D	V	L	L	A	V	A	L	G	G	G	S	V	I	D	A	A	K	G	A	A	L	L	S	G	N	G	N	I	R	D	Y	K	F	A	G
UniRef90_C2U1C0	L	C	K	E	N	G	V	E	F	L	L	A	V	A	V	G	G	G	S	V	I	D	C	T	K	A	I	A															

UniRef90_A0A017HPN4	T	R	A	N	S	D	G	I	A	P	I	V	A	V	P	T	T	A	G	T	G	S	E	V	T	G	R	A	S	V	I	T	N	S	E	T	H	V	K	K	I	I	
UniRef90_X2H2S9	V	A	P	T	K	K	P	A	V	P	T	I	A	V	P	T	T	A	G	T	A	A	E	E	V	T	I	N	G	S	V	I	T	D	E	E	K	K	K	K	F	V	
UniRef90_L5MVR9	R	K	A	V	A	E	K	A	L	P	T	L	G	T	A	V	L	T	L	A	G	T	G	S	E	E	M	N	R	G	S	V	I	T	N	W	E	T	K	R	K	F	G
UniRef90_V7I205	A	F	P	K	L	G	E	K	A	M	F	I	A	V	P	T	T	A	G	T	G	S	E	E	V	T	P	F	A	V	I	T	D	E	A	T	G	L	I	K	F	P	
UniRef90_D6SP33	P	E	K	Y	C	N	P	P	L	P	S	I	A	V	P	T	T	A	G	T	G	S	E	E	V	T	S	F	G	A	V	I	T	D	E	E	R	N	Y	K	F	S	
UniRef90_E3DM49	E	M	P	K	L	R	N	K	A	K	F	I	A	V	P	T	T	S	G	T	G	A	S	E	E	L	T	A	F	S	V	I	T	D	T	K	K	I	K	F	P		
UniRef90_UPI0003F5012D	R	Q	A	P	A	E	E	A	L	P	F	G	T	V	L	T	L	A	A	T	G	S	E	E	M	N	A	G	A	V	I	T	D	N	W	E	T	N	E	K	Y	G	
UniRef90_T4VDU0	E	F	P	T	M	G	E	K	A	Y	F	V	A	I	P	T	T	S	A	G	T	G	S	E	E	V	T	P	F	A	V	I	T	D	Q	D	T	G	L	I	K	Y	P
UniRef90_N4WJTJ4	K	K	E	Q	A	T	G	S	L	P	F	G	T	I	L	T	L	A	A	T	G	S	E	E	M	N	A	G	S	V	I	T	N	W	E	T	K	E	K	H	G		
UniRef90_R6T0L7	N	R	L	K	S	G	K	A	L	P	I	L	I	V	P	T	T	C	G	T	G	S	E	E	G	N	G	A	V	L	T	N	P	E	N	G	D	K	K	S			
UniRef90_UPI00036E03EC	T	R	A	D	P	A	G	I	A	P	I	V	A	V	P	T	T	A	G	T	A	A	E	E	M	T	G	R	A	G	S	V	I	T	D	S	E	R	Q	V	K	I	D
UniRef90_H5V1M8	V	G	H	V	T	H	P	G	V	P	L	V	A	I	N	T	T	A	G	T	A	A	E	E	M	T	G	S	N	A	V	I	T	D	S	E	R	Q	V	K	I	D	
UniRef90_UPI00037DE0C8	P	M	P	F	L	R	N	K	A	R	F	A	A	I	P	T	T	A	G	T	A	A	E	E	I	T	A	F	S	V	I	T	D	T	K	N	H	I	K	Y	P		
UniRef90_A0A025JF42	I	E	K	F	S	I	R	P	M	P	L	Y	A	V	P	T	T	A	G	T	G	S	E	E	V	T	S	G	A	C	V	V	T	D	T	A	R	N	V	K	M	A	
UniRef90_Q1QZR6	T	R	A	D	A	D	A	I	A	P	I	V	A	V	P	T	T	A	G	T	G	S	E	E	V	T	G	R	A	S	V	I	T	D	N	A	K	T	H	E	K	K	I
UniRef90_R6W5S8	N	F	P	E	L	R	K	K	A	R	F	C	A	I	P	T	T	S	G	T	A	T	E	V	T	A	F	S	V	I	T	D	D	Y	A	K	G	L	I	K	Y	P	
UniRef90_R7XRP9	V	D	K	V	T	R	P	L	P	L	M	I	V	P	T	T	S	G	T	G	A	D	V	S	Q	F	A	I	V	T	D	T	D	R	K	H	V	K	M	G			
UniRef90_C2U1C0	K	K	A	F	A	S	E	A	L	P	F	G	T	V	L	T	L	A	A	T	G	S	E	E	M	N	A	G	S	V	I												

UniRef90_A0A017HPN4	I	F	H	P	P	R	V	V	I	E	D	P	E	L	T	V	G	L	P	P	H	I	T	A	G	T	G	M	D	A	L	A	H	C	L	E	A	Y	C	S	
UniRef90_X2H2S9	C	V	D	P	H	D	I	A	V	I	D	S	P	E	M	M	A	S	M	P	A	R	D	Q	T	I	T	G	V	D	A	L	T	H	A	I	E	G	Y	I	T
UniRef90_L5MVR9	A	G	T	T	F	P	F	S	I	L	D	S	P	E	N	T	F	S	V	P	A	R	D	Q	T	I	T	G	V	D	A	L	T	H	A	I	E	Q	Y	I	T
UniRef90_V7I205	L	A	D	Y	P	D	M	A	I	V	D	A	E	L	M	M	E	M	P	K	G	L	T	A	A	S	G	I	D	A	L	T	H	A	I	E	A	Y	V	S	
UniRef90_D6SP33	F	R	S	C	P	M	Q	I	A	L	D	P	H	L	Q	S	L	P	P	N	V	A	A	A	S	G	M	D	A	L	T	H	C	A	E	A	F	V	S		
UniRef90_E3DM49	I	V	S	P	P	D	A	A	I	D	P	Q	I	L	P	A	T	M	P	P	Q	I	T	A	N	T	G	M	D	V	L	A	H	A	V	E	S	F	T	S	
UniRef90_UPI00037F5012D	W	V	T	Y	P	K	F	S	I	L	D	P	T	N	T	M	T	V	P	K	D	Q	T	I	Y	G	I	V	D	M	M	S	H	I	E	E	Q	Y	F	H	
UniRef90_T4VU0	L	A	D	M	P	N	M	A	I	V	D	S	D	L	M	M	S	M	P	K	G	L	T	A	A	S	G	I	D	A	L	T	H	A	I	E	A	Y	A	S	
UniRef90_N4WJTJ4	W	G	S	P	Y	S	F	S	I	L	D	P	A	Y	T	K	S	V	P	E	H	Q	T	V	Y	G	M	V	D	I	M	S	H	A	L	E	H	Y	F	H	
UniRef90_R6T0L7	L	R	H	C	N	A	I	V	A	I	D	S	E	E	C	M	M	T	M	P	K	N	V	L	A	S	V	G	F	D	A	F	C	H	C	M	E	A	Y	I	S
UniRef90_UPI00036E03EC	I	F	H	P	K	M	Y	V	I	C	D	P	E	L	T	T	G	M	P	R	M	I	T	V	T	G	M	D	A	L	T	H	A	I	E	A	Y	C	S		
UniRef90_H5V1M8	P	N	I	I	P	D	I	A	V	D	D	A	S	I	V	M	L	D	I	P	A	A	V	T	A	A	T	G	M	D	A	L	T	H	A	I	E	A	Y	V	S
UniRef90_UPI00037DE0C8	I	V	M	V	P	D	I	A	V	L	D	P	V	L	P	A	A	M	P	K	H	V	T	A	N	T	G	M	D	V	M	A	H	A	T	E	A	S	I	S	
UniRef90_A0A025JF42	I	R	H	P	A	Q	V	A	V	L	D	P	E	L	V	S	S	M	P	A	H	V	A	A	H	A	G	I	D	A	F	V	H	A	F	E	S	I	S		
UniRef90_Q1QZR6	I	F	H	P	P	R	V	V	I	C	D	P	E	L	T	I	G	M	P	R	A	I	T	A	G	T	G	L	D	A	F	A	H	C	V	E	A	F	S	S	
UniRef90_R6W5S8	L	A	D	F	N	I	T	A	I	D	P	A	L	A	F	T	M	P	P	A	L	T	A	Y	T	G	M	D	A	L	T	H	A	T	E	A	Y	V	S		
UniRef90_R7XRP9	R	A	L	V	P	D	V	S	I	T	D	P	R	L	L	T	T	M	P	P	D	L	N	A	A	T	G	L	D	A	L	T	H	G	I	E	A	F	V	S	
UniRef90_C2U1C0	W	V	T	F	P	Q	F	S	I	L	D	P	V	H	T	A	S	V	P	K	D	Q	T	I	Y	G	M	V	D	I	M	H	V	L	E	Q	Y	F	H	H	
UniRef90_R5J258	C	V	D	P	H	D	I	A	V	I	D	S	P	E	L	T																									

UniRef90_A0A017HPN4	P	F	F	H	P	M	S	Q	G	I	A	L	E	G	M	R	L	V	N	D	Y	L	P	R	A	Y	R	D	I	E	A	R	A	N	M	M	A	A	G		
UniRef90_X2H2S9	K	G	A	W	E	L	Q	S	D	M	F	H	L	K	A	I	E	L	I	S	R	S	L	R	D	S	V	K	G	V	D	A	K	G	E	A	N	L	Y	G	
UniRef90_L5MVR9	H	T	T	I	P	L	S	T	N	A	L	A	M	E	S	T	R	L	I	F	K	Y	L	P	L	C	Y	R	T	N	I	K	A	R	E	K	M	A	H	A	S
UniRef90_V7I205	V	L	A	S	E	Y	T	N	A	L	A	M	E	S	T	R	L	I	F	K	Y	L	P	L	C	Y	R	T	N	I	K	A	R	E	K	M	A	H	A	S	
UniRef90_D6SP33	K	W	S	T	H	I	T	D	A	Y	A	L	C	R	O	N	F	Y	L	V	F	K	Y	L	P	R	F	D	S	N	T	E	A	A	G	A	M	L	Q	A	S
UniRef90_E3DM49	T	N	A	S	D	Y	T	D	A	L	A	K	A	I	E	M	V	F	E	Y	L	P	R	A	Y	K	D	D	M	E	A	R	E	K	M	H	N	A	S		
UniRef90_UPI00037F5012D	Q	P	T	N	P	V	Q	D	R	M	A	E	G	V	M	K	A	V	I	E	A	A	P	K	E	D	E	L	E	S	Y	E	H	R	E	T	L	L	Y	A	G
UniRef90_T4VDU0	M	M	A	T	E	Y	T	N	G	L	A	E	Q	A	V	K	S	I	F	E	Y	L	P	R	A	Y	E	N	D	P	E	A	R	E	K	M	A	N	A	S	
UniRef90_N4WJTJ4	H	E	N	Q	D	R	M	V	E	G	I	L	Q	T	V	I	E	T	A	P	K	L	L	E	D	L	E	N	E	T	H	R	A	T	I	L	Y	N	G		
UniRef90_R6TOL7	R	I	A	Q	P	F	T	D	I	M	C	E	G	A	M	K	L	I	A	D	D	L	P	F	K	G	D	N	N	P	E	Y	W	D	K	L	S	L	A	S	
UniRef90_UPI00036E03EC	P	F	Y	H	P	M	S	E	G	I	A	V	E	G	A	R	L	I	A	E	N	L	P	L	V	A	A	N	G	Q	D	A	R	G	N	M	M	S	A	G	
UniRef90_H5V1M8	V	G	A	H	P	L	T	D	A	N	A	L	E	A	I	R	L	I	T	Q	W	L	P	E	D	N	G	H	N	L	E	A	R	E	M	M	A	Y	G	Q	
UniRef90_UPI00037DE0C8	I	A	A	T	S	F	T	D	P	Y	A	L	E	A	I	R	L	V	F	A	N	I	A	Y	N	E	P	G	N	M	E	A	R	F	N	M	H	N	A	S	
UniRef90_A0A025JF42	L	A	A	N	P	F	S	D	A	V	I	N	L	H	A	M	R	L	I	A	G	S	I	P	F	V	A	N	R	R	N	A	A	M	D	M	L	C	G	S	
UniRef90_Q1QZR6	P	H	Y	H	P	M	S	Q	D	V	I	A	L	E	G	M	R	L	V	K	E	Y	L	P	R	A	Y	A	D	D	I	E	A	R	A	H	M	M	S	A	A
UniRef90_R6W5S8	K	A	C	A	N	A	F	S	D	P	L	A	M	K	A	I	E	M	V	T	T	N	L	P	Q	S	Y	L	D	D	R	E	A	R	A	E	H	I	A	Q	
UniRef90_T7XRP9	L	A	A	N	P	L	A	D	T	H	A	L	N	A	V	G	L	V	C	R	N	L	P	R	T	T	I	T	E	P	A	E	A	R	A	K	M	A	Q	A	S
UniRef90_C2U1C0	G	T	N	T	E	L	Q	D	R	Y	C	E	S	V	L	R	T	V	I	E	T	A	P	K	S	D	L	E	N	Y	E	H	R	E	T	I	L	Y	C	G	
UniRef90_R5J258	K	A	H	W	E	M	T	D	M	F	H																														

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UniRef90_A0A017HPN4 R G R I P E M A A M A L V D P S T G G N P V A L T Q E N T E R L Y E D A M
UniRef90_X2H2S9 R E D I P A L A K A A F D D V C T G G N P R D T N V S E I E Q L Y H A
UniRef90_L5MVR9 D E Y L E E M A E K A T P F G P I G Q F K T L T K E I D V R E L Y R M A L
UniRef90_V7I205 E T D L D E M C V Q A F D D Q C T G A N P R Y P L I S E I K E M Y M N A
UniRef90_D6SP33 E E K L A Q M A D E T L S S G M Q L T N P R N V T K T D V I N V Y R D A
UniRef90_E3DM49 E A I L D R M S E N A H Q D P C T L T N P K E P T V K D M K T I Y K N A F
UniRef90_UPI000375012D D A Q F D L I A D R A M K R G A F G N F R T L E H D D V L E L L K K S L
UniRef90_T4VDU0 E E S L D E M V E Q A F D D Q C T G A N P R Y P L M S E I K Q M Y
UniRef90_N4WTJ4 E D S I P E M A D R T V I A R D Q F G N F K S L N R E D A V A I Y Q K A L L
UniRef90_R6T0L7 E S D I D M L T D S C M K A A G I S Y H P V K F D R S H I R D L Y L K S L L
UniRef90_UPI00036E03EC D A K R D L I A D M A I V D P T A G G N P V E L T R D A A L A I F D A A L L
UniRef90_H5V1M8 E A D I E G W L D K A L A D P C A P C N P R N A S R D E V R T L Y L E A L L
UniRef90_UPI00037DE0C8 K E V L E R M S A N A H T D P C T L T N P G K P T V A D V K A I Y T A A
UniRef90_A0A052JF42 E D S L D E L A R S Y A A D Y N R W N P R H T T E A D F R A L F R R A
UniRef90_Q1QZR6 P A R I D E L A A M A I E D P S C G G N P V A L T V E I D F K V L F R R C C M
UniRef90_R6W5S8 E E K L P A I E N A V G A D C T G S N P R P I D S E K M A E L F K C C
UniRef90_R7XRP9 D A D I D T M A H T T L D D A C L T N P R E A T E G E I R Q L F K D A L L
UniRef90_C2U1C0 E N E I D V M A D K A M A Y G E F G N F K K L N K D D V L N I Y K A S L
UniRef90_R5J258 K E D F E V M A E K A F D D P C T G G N P R E V T K E D I I G L F N E A
UniRef90_R6YNB0 E Q A L D E M S E K A F D D Q C T G A N P R Y P L I S E I K D I Y L K
UniRef90_J0N5I2 E S G I A A L T E D A F N D V C T P G N P R P A S R E D I E A L Y R S L L
UniRef90_UPI00037CDC48 D S R I D E M A D K A M K A G P F G N F K L Q R E D V V S I Y K A S L L
UniRef90_Q5KVS6 E E N L E L M A D K A M A F G E F G R F K T L N R D D V L A I L R A S L
UniRef90_A6W0M4 K A R F D T M A E Q A L A S G S P S N N P R I P S T E E M I T I Y Q Q
UniRef90_E8LJK5 V D I V D E L V E A A S K T R L L G N N P K D I T R D E M K E I Y L K L I A
UniRef90_H1D1E4 E E K K D A I A H N A V L D A C T P E N P R K V D D E T M G R L L E A
UniRef90_G9PYZ1 E K A L D E M T E Q A F D D Q C T G A N P R Y P L L S E I K E M Y L K A
UniRef90_A9AY98 E D S L P M L A E Q A F D D G A V Y H N P V A P T V D D L G I L Q A A
UniRef90_UPI0004772911 E A D V E K L A T M T M V D A C L S T N P R E A T R E D I E A L F R Q A L
UniRef90_UPI0004770AAA L N Q L P K L I E D S M R S G N I L A N P R L T N A N D V K T I I E D A
UniRef90_L0ED85 R E K L D V M A E D A V R F G P L G S F R K L E K D D V K A I L E M A L
UniRef90_E3DRV0 A E K L E K M A E Q A T R R G E L G N F K P L S K E D V L N I Y Q K A L L
UniRef90_UPI00034D91BB A D E L D R I A D D A L A D A C Y P G N P R E A D H D T V V E L F K K I M A
UniRef90_B8D103 E K E L D E M A D I A H N D Q C T G T N P R M P L V N E I L K E I Y R Q A
UniRef90_R6S2G8 E D E F K E I S E N A V G D A C T G S N P R T I D P A T M E R L F
UniRef90_R4K3T2 I K E L D K M C E L A F D D Q C I G A N P R Y P L I S E I K Q M F I N A F
UniRef90_N9RPT0 K Q Y F D D M A E Q A L A S G S P S N N P I V P T I Q Q M I S L Y Q Q
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UniRef90_UPI000373B336 K E K F E K M A T D A I A S G S P A N N P R V P S Q N E I E K L Y Q
UniRef90_E5WGE7 E E A I S K M A T D A I D S G S P G N N P R V P T Q S E L E E L Y
UniRef90_B1LYX2 R Q D L E R M A T D A M Q T R L L V N N P R E V T Y D D A F A I Y A E A L G
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UniRef90_C9XPW6 E D S I D E M V I Q A F D D Q C T G A N P R Y P L M N E I K D M Y L N S
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UniRef90_W4QRQ5 E E Y I P E M S V V A L Q D A C M I T N P R D I T L K E V E A L F R Q A L
UniRef90_C8PSU0 E E H L E Q M A E A A V L H R S R S G K I R T L T A A D V L A I Y K A A L
UniRef90_UPI00041AE287 K D K F D V M A D D A M K S G N I L V N P R K T T K A D I L N L Y S K A
UniRef90_K5UPS2 K E D C H S W I G K V L A D P C L G G N P R Q P T P Q E I E D L Y L S C L
UniRef90_Q1YQB0 R E H L E I M A E Q A I G S G S P G N N P R M P S A E E I I Q I Y K K
UniRef90_R1IXF3 I D R M D T M A K Q A M A S G S P A N N P R L P S H K E M V D I Y
UniRef90_D0U590 R E Q L P V M A E Q A L A S G S P N N N P R V P S A D E I I E I Y K Q
UniRef90_W7DJY4 E Q D I E A L S K D A L A D V C T G G N P R P T N T T E I Q E L Y Q S L L
UniRef90_R7FEC2 A D K L P E V A A N A I G D A C T G S N P R O P S Q E E M E K L L K A C
UniRef90_K0CZQ6 K E A F S T M A E Q A L A S G S P G N N P R V P T I E E M V A I Y
UniRef90_G7WCS9 Q E L I H D M A I D A M K S G N V L I N P R Q T L A D I E A L Y Q K A L
UniRef90_U7V9A1 E Q E L D Q M V E D A F D D Q C T G A N P R Y P L M S D L K E M Y L R A
UniRef90_R7ZHP3 K D A I P K M A A D A I A S G S P G N N P K E P T H D E L I E L Y K M A
UniRef90_P76553 S A H Y G A W A Q A I E S D I C L R S N P R T A S L E I Q I V G L Y A A A
UniRef90_Q5GML8 E E D L D E M T E N A F D D Q C T G A N P R Y P L F S E I K Q L Y L N A
UniRef90_D4L5A2 D E E L D A M T E Q A F D D Q C T G A N P R Y P L F K E I K Q M Y L N A
UniRef90_D4XWF5 P E D L E K I S Q S A L S D V C T G G N P R D V N L E D I K T L Y K K L L
UniRef90_D2RIM2 E D M L D D L V N G T L I L T G G Y R V L T K E E I R E I F R R A M
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UniRef90_UPI0002EF231A K D E I P K M V N D A M E S G S P D N N P R V P T I E L K V L Y E D C
UniRef90_UPI0002F40739 I E E L P L M A E Q A L A S G S P G N N P R V P G K E E I I G L Y R E V Y G
UniRef90_R7CNR2 E D K I D A M A D D A M K S G N I A V N P R S S R K Q D I L V E L Y H K A L
UniRef90_B8IM64 E A D L P R L A T D A M Q T R L L V N N P R E V T Y A D A I A I Y S E A L
UniRef90_UPI0003B701E0 R E A I P S M A E A A M E V R L L E N N P R P L T K E D A E L L Y S E A
UniRef90_R6ET46 E T H F E T M A E K A A D G G L A H G F I P L N K E D V M N I Y K M A L
UniRef90_U3H2J4 T S D I F L S R H A M E D P C I L T N P R E S S Q R D V E V V Y A E A L
UniRef90_E3A364 E E D F L S I A E K S K K N F S D G S N A K Q M T V I E T Y R E I V A A A
UniRef90_S7UL32 E N D L A G L A R N A A R D Q C L L T N P K S A G E D I L R R L Y A Q A L
UniRef90_UPI0004777615 E S K L D K M A E L A F D D Q C T G A N P R Y P L I D E I K G L Y T K A F
UniRef90_UPI000428A2E4 E S K I E V M A D K A M A N G E F G N F K K L N R D D V L A V Y R A S L
UniRef90_U7D7X7 L D D I P R L A E K A M L D P C N A T N P R P T R G D L E T L Y R E A L
UniRef90_A6BZ17 E V D L D Q L A E E A S R Q W T G N F N P R P V D Q S L R D L Y E C A F
UniRef90_D2K2B5 E D D V P V L A A T A L Q D A C M S T N P R A A D E I Q M Q A L F R A A M
UniRef90_B8FA85 T T D I P S L A A N A I K D A C M A T N P A K A N Q R D I E V I Y E E S L
UniRef90_UPI00046AF0F8 E D K F E I M A A Q A L A S G S P G N N P R V P R Q D E I V Q L Y Q N I W A
UniRef90_S5S511 P D R I D E L S A M A I E D P S A G G N P V A M T L I E N T K A L F R D C F
UniRef90_J8VFB2 R E R E D E M A S Q A L A S G S P G N N P R V P T V D E M V K L Y Q A L W G
UniRef90_HOQU77 L D D V E L L A R H A L A D A C M T T N P R Q P T L V Q V E N L Y R A A L
UniRef90_UPI00046A9029 Q K E F E A L A D R A F E D Q C T P A N P K M P L V T E L A Q I Y R N A Y N
UniRef90_E0I5G2 P A D F D Q L A D R A F E D Q C T T A N P R M P L V T E L A D I Y R N A F
UniRef90_B5YAY3 E D E I E K L A K N A M E G G L F E M D R Y K L S F E V V E I M R K A
UniRef90_UPI00036CC9B3 E A D L E G L V E G A A K T R L L D N N P R C M N K D D I R T I Y K
UniRef90_B6ATZ1 Q D F L P K L A S D A M Q T R L L V N N P R E L T E A D A L N I Y K A A
UniRef90_Q5X332 H S Q I D R L A K M A T E D A A A S N T V L F T F E Q Y K E L L S K A I G
UniRef90_A5D1W0 R E D L P L L A E K A F E D Q C T T T N P R L P L I A E L E E I L R R A Y G

UniRef90_UPI00047A0106	K	R	T	G	L	Y	D	K	V	V	N	S	L	K	K	A	G	V	E	F	I	E	L	P	G	A	Q	P	N	D	R	L	L	S	L	V	R	E	G	I	K				
UniRef90_R6UJA9	K	N	G	Y	V	I	A	P	I	E	E	K	L	D	M	M	G	I	V	A	Y	A	L	C	F	Y	D	G	T	V	K	P	N	P	T	L	A	S	A	M	E	G	V	I	Q
UniRef90_I2Q2K9	V	K	V	G	L	A	K	Q	V	E	D	V	L	A	A	A	G	V	I	A	Y	A	L	C	F	Y	D	G	T	V	K	P	N	P	T	L	A	S	A	M	E	G	V	I	Q
UniRef90_UPI00004787E47	R	A	A	G	P	F	K	A	V	E	S	A	L	A	A	D	G	G	V	A	Y	E	V	F	Y	D	G	T	V	K	P	N	P	T	L	A	S	A	M	E	G	V	I	Q	
UniRef90_J1SW65	R	N	L	G	L	C	D	R	A	L	R	S	L	K	G	A	G	I	D	V	S	I	F	D	S	V	E	A	D	P	S	I	E	E	L	D	N	V	Q	A	E	F	I	Q	
UniRef90_C8W2N2	S	S	A	G	W	V	D	T	A	L	D	S	L	K	E	V	G	I	E	Y	E	L	C	F	Y	D	G	T	V	K	P	N	P	T	L	A	S	A	M	E	G	V	I	Q	
UniRef90_A0A024QEZ7	S	S	L	G	Y	I	S	N	V	R	D	Y	L	A	T	A	K	V	E	S	V	T	Y	L	D	G	T	V	K	P	N	P	T	L	A	S	A	M	E	G	V	I	Q		
UniRef90_UPI0003A7F07F	R	G	A	G	L	E	D	A	A	G	G	L	D	E	D	A	G	I	A	V	E	I	Y	L	D	G	T	V	K	P	N	P	T	L	A	S	A	M	E	G	V	I	Q		
UniRef90_UPI000302ACE5	F	D	L	G	I	L	D	K	V	T	K	V	L	D	E	I	G	V	K	H	D	I	F	H	D	V	E	P	D	P	T	L	S	N	V	N	Q	A	E	F	I	Q			
UniRef90_UPI0000463D1DE	V	K	T	G	L	I	A	R	L	E	E	L	A	A	A	A	E	G	L	P	F	S	R	F	L	D	V	E	P	D	P	T	L	A	S	A	M	E	G	V	I	Q			
UniRef90_B2TJ84	V	K	L	G	N	V	Q	A	V	I	D	I	L	D	K	E	A	K	I	N	Y	F	I	Y	D	E	A	I	N	G	E	P	D	P	T	L	A	S	A	M	E	G	V	I	Q
UniRef90_U2N0H1	N	D	L	G	Y	T	N	R	V	T	D	V	L	S	E	I	G	V	D	F	R	I	F	T	E	L	V	E	P	D	P	T	L	S	T	A	L	K	A	N	I	D			
UniRef90_B6DTN0	L	K	A	G	W	E	A	A	V	A	R	T	L	K	R	E	G	I	H	F	E	I	W	Q	L	E	N	G	E	P	D	P	T	L	K	D	F	E	V	Q	A	T	R		
UniRef90_F8DPN8	A	A	A	G	H	T	D	A	A	V	A	R	T	L	R	D	E	G	I	A	C	A	T	F	L	G	V	E	P	D	P	T	L	R	D	T	E	V	M	A	G	S	E		
UniRef90_R7CYM4	R	K	Y	G	Y	L	G	N	V	E	R	Y	L	K	E	N	G	V	E	S	V	V	F	D	K	V	L	P	N	P	I	K	Q	H	V	M	E	A	A	C	E	I	Q		
UniRef90_UPI0003B417A6	I	E	A	G	W	A	D	A	A	A	A	S	L	R	E	H	G	H	K	V	T	M	F	S	D	V	E	P	D	P	T	L	S	D	S	E	S	M	A	G	A	C	E		
UniRef90_UPI00036CA74	Y	E	L	G	M	T	K	E	L	E	T	V	L	E	E	I	D	L	E	T	Y	D	I	F	Y	D	V	E	P	D	P	T	L	S	D	T	V	K	R	G	V	A	I	Q	
UniRef9																																													

[illegible]

UniRef90_UPI00047A0106	G	K	A	V	P	Q	E	K	A	L	P	V	G	V	I	L	T	L	A	A	T	G	S	E	A	S	K	S	S	V	I	T	N	E	D	K	G	W	Y	K	N	V				
UniRef90_R6UJA9	T	F	P	T	M	G	E	K	A	T	V	F	V	A	V	I	P	T	T	S	S	G	T	G	S	E	E	V	T	S	F	A	V	I	T	D	N	T	G	L	K	Y	P			
UniRef90_I2Q2K9	M	G	L	L	K	A	P	L	P	Y	F	I	A	I	A	I	P	T	T	A	G	T	G	S	E	E	V	T	G	F	A	S	V	I	T	D	N	T	G	L	H	W	K			
UniRef90_UPI0004787E47	M	E	R	M	T	G	P	Y	D	P	I	A	I	A	I	A	P	T	T	A	G	T	G	S	E	E	V	T	G	R	S	S	V	I	T	S	D	Q	E	K	R	R	K	I		
UniRef90_J1SW65	V	G	N	A	K	G	P	R	L	P	I	V	L	I	A	I	P	T	T	A	G	T	G	S	E	E	V	T	G	P	V	S	I	I	T	S	D	D	E	K	R	G	V	S		
UniRef90_C8W2N2	V	N	R	I	I	H	L	P	P	M	V	V	V	V	V	V	P	T	T	A	G	T	G	S	E	E	V	T	S	Q	F	A	M	I	V	I	T	D	N	T	G	K	V	K	M	T
UniRef90_A0A024QEZ7	R	N	K	I	T	K	A	P	I	A	H	I	A	I	A	I	P	T	T	A	G	T	G	S	E	E	V	T	S	D	A	T	V	I	T	N	T	A	N	D	V	K	M	M		
UniRef90_UPI0003A7F07F	V	G	N	A	T	G	P	R	L	P	L	I	L	I	A	I	P	T	T	A	G	T	G	S	E	E	V	T	G	P	I	A	I	V	I	T	T	G	E	T	K	M	S	S		
UniRef90_UPI000302ACE5	E	L	P	P	L	G	Q	K	A	I	M	V	A	I	A	I	P	T	T	A	G	T	G	S	E	E	V	T	G	P	F	A	I	V	I	T	D	D	Q	V	G	V	K	Y	P	
UniRef90_UPI000463D1DE	I	D	L	V	P	A	P	G	L	K	L	I	L	V	A	I	P	T	T	A	G	T	G	S	E	E	V	T	G	P	I	A	I	L	S	D	T	H	E	K	L	K	K	G		
UniRef90_B2TJ84	G	K	Q	I	E	N	Q	P	P	L	V	A	I	A	I	A	P	T	T	A	G	T	G	S	E	E	V	T	K	F	T	I	I	L	S	D	T	K	T	D	V	K	M	L		
UniRef90_U2N0H1	P	F	P	K	L	G	T	K	A	M	M	V	A	I	A	I	A	T	S	A	G	T	G	S	E	E	V	T	G	P	F	A	I	V	I	T	D	E	K	S	G	I	K	Y	P	
UniRef90_F6DTN0	V	D	K	I	T	N	P	L	P	P	M	I	M	V	A	I	P	S	T	A	G	S	G	A	D	I	V	S	T	Q	F	A	I	V	I	D	S	T	Q	R	S	V	K	M	T	
UniRef90_B8PN8	V	D	A	I	P	K	P	M	P	L	V	C	V	A	I	A	P	T	T	A	G	S	G	A	D	I	V	S	T	Q	F	A	I	V	I	D	S	T	P	R	R	V	K	I	A	
UniRef90_R7CYM4	K	G	K	P	V	T	R	A	L	P	I	L	A	I	A	I	P	T	T	A	G	T	G	T	E	A	D	S	P	W	T	I	V	I	T	N	E	E	L	Q	E	K	I	A	C	
UniRef90_UPI0003B417A6	V	D	N	V	G	R	P	G	P	L	I	C	V	A	I	A	P	T	T	S	G	S	G	A	D	V	S	T	Q	F	A	I	I	L	D	S	A	R	K	V	K	I	A			
UniRef90_UPI00036CFA74	D	L	P	P	L	G	E	K	A	M	M	V	A	I	A	I	P	T	T	S	G	S	G	A	D	V	S	T	Q	F	A	I	V	I	T	D	R									

UniRef90_UPI00047A0106	D	I	L	I	R	P	Q	F	A	I	M	N	P	E	L	T	F	T	L	P	K	Y	Q	T	S	C	G	V	A	D	I	M	A	H	I	M	E	R	Y	F	T		
UniRef90_R6UJA9	L	A	D	Y	P	N	M	A	I	V	D	P	A	D	N	M	T	N	Q	P	K	F	L	T	S	A	S	G	I	D	A	L	T	H	A	I	E	A	Y	I	S		
UniRef90_I2Q2K9	M	V	L	L	P	N	A	I	V	D	P	A	L	L	M	T	G	L	P	P	K	F	L	T	S	A	S	G	I	D	A	L	T	H	A	I	E	A	Y	I	S		
UniRef90_UPI0004787E47	I	F	S	P	W	L	M	A	I	V	D	P	E	L	T	V	T	L	P	P	S	F	L	T	S	A	A	T	G	M	D	A	F	T	H	C	I	E	S	L	T	C	
UniRef90_J1SW65	P	I	L	L	P	D	I	A	I	V	D	P	A	D	L	T	L	G	L	P	P	S	Q	I	L	T	A	S	T	G	V	D	A	M	V	H	A	I	E	A	Y	T	S
UniRef90_C8W2N2	I	S	L	V	P	D	I	A	I	V	D	P	V	V	L	Q	T	K	D	A	K	E	L	V	T	A	V	T	G	M	D	A	L	S	H	A	I	E	A	Y	T	S	
UniRef90_A0A024QEZ7	I	K	Q	P	A	F	M	A	I	V	D	P	L	L	L	T	L	S	S	P	K	H	V	T	A	A	T	G	I	D	A	L	S	H	A	I	E	A	Y	I	S		
UniRef90_UPI0003A7F07F	P	P	L	Y	A	D	M	A	V	D	P	A	D	L	T	L	G	L	P	P	H	V	T	A	A	T	G	I	D	A	M	V	H	A	I	E	S	I	T	S			
UniRef90_UPI000302ACE5	L	A	D	Y	P	N	M	A	I	V	D	P	E	L	T	V	L	N	M	P	K	K	V	T	A	Y	G	G	I	D	A	L	T	H	A	I	E	A	Y	V	S		
UniRef90_UPI0000463D1DE	I	V	S	A	K	H	L	F	A	V	D	P	Q	L	T	L	G	L	P	Q	Q	V	T	A	A	T	G	M	D	A	L	T	H	A	I	E	A	Y	T	S			
UniRef90_B2TJ84	I	S	L	M	P	T	F	L	A	I	V	D	S	R	F	T	M	T	A	P	P	K	L	T	A	A	T	G	L	D	A	L	T	H	A	I	E	A	Y	T	S		
UniRef90_U2N0H1	L	A	D	Y	P	D	M	A	I	V	D	P	E	L	T	M	M	N	M	P	K	G	L	T	S	A	S	G	I	D	A	L	T	H	G	L	E	A	Y	T	S		
UniRef90_F6DTN0	I	V	S	K	P	D	I	F	S	I	T	D	P	L	I	T	L	T	K	D	P	Q	E	L	T	A	N	T	G	M	D	V	L	T	H	A	I	E	A	Y	V	S	
UniRef90_B8PN8	I	V	S	K	P	D	V	A	L	V	D	P	L	I	T	L	T	L	K	D	P	R	E	L	T	A	A	T	G	L	D	A	L	T	H	A	I	E	A	Y	A	S	
UniRef90_R7CYM4	D	L	T	Y	P	T	L	S	I	I	D	P	E	L	T	M	V	S	I	P	P	H	L	T	A	Y	Q	G	F	D	A	F	F	H	A	S	E	G	F	I	A		
UniRef90_UPI0003B417A6	I	V	S	K	P	D	A	S	L	L	D	P	E	L	T	V	S	T	M	S	K	E	L	T	A	N	F	G	L	D	A	L	T	H	A	I	E	A	Y	V	S		
UniRef90_UPI00036CFA74	L	A	D	Y	P	T	M	A	I	V	D	P	Q	L	T	L	N	M	P	K	E	L	T	A	N	F	G	G	V	D	A	L	T	H	A	I	E	A	Y	A	S		
UniRef90_L0NFT1	P	V	I	L	P	D	V	A	V	L	D	P	D	L	T	L	G	L	P	P	K	G	I	T	A	A	T	G	I	D	A	M	V	H	A	I</							

UniRef90_UPI00047A0106	N	T	R	D	T	D	R	L	C	E	A	T	L	K	T	V	I	H	N	A	P	I	V	L	K	D	P	Q	N	Y	A	R	A	E	I	M	W	A	G					
UniRef90_R6UJA9	V	M	A	T	D	T	D	G	L	A	L	K	A	M	K	N	I	F	T	K	Y	L	P	S	A	Y	D	N	D	I	E	A	K	R	E	K	M	A	D	A	S			
UniRef90_I2Q2K9	V	A	A	M	E	Y	T	D	G	L	A	L	K	A	M	K	N	I	F	T	K	Y	L	P	S	A	Y	D	N	D	I	E	A	K	R	E	K	M	A	D	A	S		
UniRef90_UPI0004787E47	P	V	F	H	P	L	S	C	G	I	A	L	Q	A	L	E	M	I	G	A	N	L	I	E	R	A	T	R	D	D	I	E	A	R	E	G	N	M	L	V	A	A		
UniRef90_J1SW65	R	S	A	N	P	L	S	K	M	L	A	R	Q	A	L	Q	L	I	G	A	N	L	I	E	R	A	T	R	D	D	I	E	A	R	E	G	N	M	L	V	A	A		
UniRef90_C8W2N2	L	J	A	A	T	P	L	S	T	D	V	H	A	I	E	A	L	Q	L	I	G	A	N	L	I	E	R	S	S	V	R	T	N	L	K	A	R	S	A	M	A	M	A	S
UniRef90_A0A024QEZ7	R	Q	S	Q	P	M	T	D	T	L	A	L	S	A	M	K	L	I	V	D	H	E	I	E	Y	E	H	G	E	N	L	D	A	R	S	G	A	M	A	L	G	A		
UniRef90_UPI0003A7F07F	K	V	K	R	N	P	V	S	E	A	L	A	L	A	L	A	R	L	H	E	R	A	C	Q	A	D	G	G	D	R	E	A	R	S	D	M	L	T	G	A				
UniRef90_UPI000302ACE5	V	M	A	T	D	F	T	D	G	L	A	L	Q	A	I	A	L	L	F	K	Y	L	P	R	A	Y	K	N	D	P	E	A	R	E	K	V	H	Y	A	A				
UniRef90_UPI000463D1DE	V	N	A	T	D	V	T	S	D	M	L	A	E	K	A	I	R	L	I	Y	G	N	I	R	K	A	F	A	N	G	E	E	A	R	T	G	N	M	L	E	G	S		
UniRef90_B2TJ84	K	K	S	Q	P	L	S	D	T	F	A	L	S	A	I	K	K	I	G	S	F	K	Y	L	P	I	A	F	N	D	N	E	E	A	R	T	Q	M	A	L	J	A		
UniRef90_U2N0H1	I	Q	A	S	E	Y	T	N	G	L	A	L	E	S	I	R	L	I	F	K	Y	L	P	I	A	Y	T	T	N	I	K	S	R	E	K	M	A	H	A	S				
UniRef90_F6DTN0	L	J	A	A	N	F	L	T	D	S	Y	S	L	T	A	I	R	L	I	G	S	S	F	K	S	V	S	S	K	T	N	L	E	A	K	D	A	M	A	K	A	S		
UniRef90_B8PDN8	N	A	H	S	P	V	T	D	M	F	A	L	E	A	V	R	G	I	G	S	F	K	D	V	L	D	D	L	G	N	R	D	A	R	A	R	M	A	L	G	S			
UniRef90_R7CYM4	N	C	A	T	P	I	V	S	D	L	F	A	L	E	A	I	R	L	I	Y	K	Y	L	P	V	K	D	D	G	R	N	L	K	A	R	A	K	V	A	W	A	S		
UniRef90_UPI0003B417A6	N	A	S	S	P	V	T	D	L	F	A	L	E	A	V	R	F	V	K	T	H	R	A	L	D	P	L	N	M	E	A	R	G	G	M	L	L	G	S					
UniRef90_UPI00036CFA74	V	F	A	S	E	Y	T	N	G	L	A	L	E	A	I	R	L	L	F	K	Y	L	P	R	S	Y	K	H	D	P	M	K	A	R	E	K	V	H	Y	A	A			
UniRef90_L0NFT1	T	N	A	N	N	N	P	L	S	K	M	L	A	R	Q	A	L	L	L	L	E	K	A	V	F	E	G	Q	D															

UniRef90_UPI00047A0106	T	I	A	H	N	S	T	G	R	I	G	D	W	S	H	A	L	E	H	E	L	S	A	Y	H	D	I	A	H	G	A	G	L	A	I	V	F	P	A			
UniRef90_R6UJA9	T	M	A	G	M	A	F	S	N	A	G	L	G	V	C	H	S	M	A	H	K	L	S	A	F	Y	H	D	I	P	H	G	L	A	N	A	L	L	T	M		
UniRef90_I2Q2K9	T	M	A	G	I	A	F	S	N	A	G	L	G	A	T	H	S	L	A	H	K	L	S	A	F	Y	H	D	I	P	H	G	D	A	N	A	L	L	T	R		
UniRef90_UPI0004787E47	S	M	G	A	I	A	F	S	N	A	G	L	G	A	T	H	S	L	A	H	K	L	S	T	E	L	L	G	I	H	H	G	L	A	N	A	L	L	C	P	A	
UniRef90_J1SW65	M	L	A	G	Q	A	F	A	N	S	P	V	A	A	V	H	A	L	A	Y	P	M	G	S	S	F	H	V	P	H	G	L	S	T	A	L	L	L	P	H		
UniRef90_C8W2N2	L	Q	A	G	L	A	F	S	N	A	S	L	G	A	T	H	A	M	T	H	Q	V	D	G	L	L	D	I	L	P	H	G	K	T	N	A	V	L	L	P	Y	
UniRef90_A0A024QEZ7	L	Q	A	G	I	A	F	T	N	A	S	V	G	C	L	V	H	G	M	S	R	P	I	G	A	L	F	H	V	P	H	G	Y	S	N	A	M	L	L	P	A	
UniRef90_UPI0003A7F07F	L	L	A	G	Q	A	F	A	N	A	P	V	G	A	V	H	A	L	A	Y	P	I	G	G	I	F	H	V	P	H	G	L	S	N	S	L	V	L	P	H		
UniRef90_UPI000302ACE5	T	I	A	G	M	A	F	A	N	A	F	L	G	V	C	H	S	M	A	H	K	L	G	A	T	F	H	V	P	H	G	L	A	N	S	L	M	I	S	H		
UniRef90_UPI0000463D1DE	L	L	A	G	M	A	F	A	N	A	G	V	T	A	V	H	A	F	A	Y	P	I	G	A	E	F	H	V	P	H	G	V	A	N	S	L	M	I	V	P		
UniRef90_B2TJ84	L	E	A	G	I	A	F	N	N	S	V	T	I	V	H	G	M	S	R	P	I	G	A	L	F	H	V	P	H	G	I	S	N	A	M	L	L	K	E			
UniRef90_U2N0H1	T	M	A	G	M	A	F	A	N	A	C	F	L	G	V	C	H	S	M	A	H	K	L	G	A	E	H	H	I	P	H	G	V	A	N	A	L	L	L	N	E	
UniRef90_F6DTN0	L	L	A	A	I	A	A	S	N	A	L	I	G	A	V	H	A	L	A	S	H	Q	L	G	G	R	F	N	L	P	H	G	M	A	N	A	L	L	L	P	H	
UniRef90_B8DPN8	M	N	A	G	L	A	F	S	N	A	L	I	G	A	V	H	A	L	S	H	S	L	G	G	R	L	D	L	P	H	G	E	C	N	A	L	L	L	P	F		
UniRef90_R7CYM4	T	L	A	G	M	V	E	S	T	S	S	C	I	S	E	H	S	L	E	H	A	M	S	A	Y	Y	Q	L	P	H	G	A	G	L	I	A	L	S	E	A		
UniRef90_UPI0003B417A6	L	Y	A	G	L	A	F	S	N	A	S	L	I	G	A	V	H	A	L	S	H	S	L	G	G	L	D	L	P	H	G	K	C	N	A	L	L	L	D	H		
UniRef90_UPI00036CFA74	T	M	A	G	M	A	F	A	N	S	F	L	G	I	C	H	S	M	A	H	Q	L	G	G	M	F	H	V	P	H	G	L	S	N	A	L	L	L	S	H		
UniRef90_L0NFT1	M	L	A	G	Q	A	F	A	N	S	P	V	A	A	V	H	A	L	A	Y	P	I	G	G	R	F	H	V	P	H	G	L	S	N	A	N	A	L	V	L	P	H
UniRef90_K2KT24	L	I	A	G	M	A	F	A	N	A	S</																															

UniRef90_UPI00047A0106	W	M	K	Y	V	V	K	H	D	I	N	R	F	A	Q	F	A	N	R	V	W	G	R	L	E	D	F	F	R	S	I	G	L	P	K	V	R	L	N	I	T
UniRef90_R6UJA9	I	M	R	Y	N	A	D	P	V	P	V	K	M	G	T	F	A	S	Q	Y	F	L	D	K	I	E	A	L	S	R	V	G	I	P	K	K	D	S	I	T	
UniRef90_I2Q2K9	V	L	D	Y	N	K	I	A	C	R	E	K	M	A	T	E	I	A	S	Q	A	A	G	E	A	I	R	E	A	L	S	R	V	G	I	P	K	K	D	S	I
UniRef90_UPI0004787E47	V	M	R	F	N	N	V	N	Q	A	A	P	H	Y	G	R	I	A	L	A	R	L	F	Y	D	D	R	L	V	E	A	M	I	D	S	I	G	I	K	R	G
UniRef90_J1SW65	V	L	R	F	N	A	P	V	A	A	T	L	Y	G	Q	I	A	P	A	F	L	D	D	R	L	A	G	L	D	S	I	G	I	P	K	R	G	L	G	V	
UniRef90_C8W2N2	V	M	E	F	N	M	I	A	S	T	D	K	F	V	R	I	A	E	A	F	G	E	C	Y	V	R	R	L	L	T	R	D	I	G	I	P	K	N	L		
UniRef90_A0A024QEZ7	V	L	E	F	S	Q	E	H	C	A	G	E	R	N	Q	I	A	A	D	I	A	V	N	E	V	K	R	L	C	C	E	R	I	Q	I	P	N	L	R		
UniRef90_UPI0003A7F07F	V	L	R	F	N	L	D	V	H	A	G	R	D	Y	A	R	I	A	G	H	L	G	A	L	I	E	C	Q	E	R	I	R	R	L	T	E	V	G	I		
UniRef90_UPI000302ACE5	V	I	R	Y	N	A	T	D	I	P	F	K	Q	A	I	F	P	Q	Y	K	Y	P	N	A	K	A	R	Y	A	Q	I	A	D	Y	L	R	L	G			
UniRef90_UPI0000463D1DE	V	M	E	F	N	M	L	G	N	L	P	R	F	A	F	L	A	E	A	L	G	E	N	L	R	T	L	S	A	D	L	K	V	P	A	H	L	G			
UniRef90_B2TJ84	C	F	N	F	V	L	D	G	A	Y	S	K	F	A	D	L	A	R	A	F	V	E	E	V	D	K	L	C	K	L	I	F	I	A	P	T	E	Y			
UniRef90_U2N0H1	V	I	K	F	N	A	A	D	D	P	K	K	Q	D	E	K	V	D	L	L	I	K	A	I	N	E	L	K	K	E	I	L	F	I	A	P	T	E			
UniRef90_F6DTN0	V	M	E	Y	N	F	P	A	C	I	E	R	L	A	D	I	G	E	A	L	G	E	A	V	R	T	L	A	R	E	L	V	I	A	E	N	F	T			
UniRef90_B8DPN8	V	V	R	R	N	Y	V	A	A	P	Q	R	Y	R	V	A	E	A	L	G	E	V	R	D	A	L	F	A	R	L	G	A	M	R	R	Y	G	V			
UniRef90_R7CYM4	Y	F	E	T	F	R	N	D	C	M	K	R	Y	M	K	M	A	D	V	M	I	D	A	L	V	R	M	Q	K	E	C	G	V	Y	T	S	D	W			
UniRef90_UPI0003B417A6	V	I	A	H	N	F	E	A	D	P	E	R	K	S	A	V	G	A	L	G	A	D	I	N	A	S	F	K	T	D	M	V	G	V	T	E	T	L			
UniRef90_UPI00036CFA74	V	I	R	Y	N	A	T	A	E	P	F	K	Q	A	T	F	S	Q	Y	K	Y	P	I	N	A	K	W	R	Y	S	M	I	A	D	Y	L	K	L			
UniRef90_L0NFT1	V	L	R	F	N	A	P	A	A	S	S	V	Y	A	E	I	A	G	A	F	I	E	G	L	A	E	L	S	V	K	I	L	G	L	Q	S	R	L			
UniRef90_K2KT24	V	I	R	F	N	L	P	A	A	K	L	Q	A	A	E	L	A	P	C	L	I	E	G	V	A	E	F	V	K	R</											

[illegible]

UniRef90_U2U7U7	Y	T	S	G	F	T	K	K	V	E	S	L	D	A	M	G	I	V	H	S	S	F	W	S	I	S	P	D	P	K	L	Q	D	A	M	K	G	L	I	E				
UniRef90_C8S000	A	S	L	P	I	T	A	N	A	L	E	V	L	D	A	G	M	G	L	G	R	A	V	F	S	D	I	V	K	P	N	P	N	E	T	N	M	A	G	V	I	E		
UniRef90_A6NPU7	V	K	F	N	V	T	A	N	A	L	E	V	L	D	A	G	M	G	A	Y	E	I	Y	F	S	D	I	V	K	P	N	P	T	I	E	N	M	A	G	V	I	E		
UniRef90_V2XLC5	K	K	I	G	L	I	D	E	V	I	K	L	E	K	E	G	E	F	F	V	V	E	L	Y	D	I	E	D	P	N	P	R	I	E	S	V	I	E	G	V	I	E		
UniRef90_E0E1G2	K	K	N	G	I	Y	D	S	V	V	A	E	L	K	D	N	N	I	Y	F	F	E	E	L	S	G	V	D	P	N	P	R	I	E	S	V	V	E	G	I	K			
UniRef90_UPI0003630A95	G	A	I	G	F	V	R	K	V	T	D	I	L	N	S	R	D	P	Q	P	V	T	V	I	D	S	N	V	D	P	N	P	E	L	A	T	V	V	Q	A	G	A	A	
UniRef90_F0PAF9	Q	F	G	Y	A	D	I	V	R	K	E	L	Q	N	R	D	V	K	I	E	V	F	S	D	I	V	E	D	P	N	P	S	T	N	T	V	Y	A	G	A	T	K		
UniRef90_B9Y6P9	K	L	G	N	L	D	K	V	L	K	V	L	N	Q	R	H	I	A	Y	S	I	D	A	E	I	N	S	E	P	P	C	Y	N	T	M	I	V	H	G	L	K			
UniRef90_UPI00047AE89F	K	R	T	G	L	Y	D	T	I	R	K	I	L	K	D	A	G	K	T	V	C	E	L	S	G	I	T	S	N	P	T	A	D	K	V	Y	E	G	L	I	E			
UniRef90_D2QA70	K	S	S	G	T	Y	A	K	V	R	G	L	E	E	A	G	A	G	L	T	V	T	V	L	D	K	I	V	T	D	P	E	P	K	T	T	T	V	D	E	G	A	R	
UniRef90_S9RBT1	V	G	G	A	V	H	A	R	V	L	V	A	D	L	A	Q	A	G	A	R	V	T	E	Y	A	G	I	T	D	P	E	P	K	D	T	N	V	T	G	A	L	D		
UniRef90_B0VFL1	K	Q	S	G	A	L	S	D	T	I	S	V	L	R	E	A	D	I	N	Y	A	L	F	D	R	I	T	E	N	P	T	L	D	I	V	M	E	G	K	S				
UniRef90_J0GAS7																																												
UniRef90_R9LVX4	E	R	A	G	L	L	D	I	P	L	E	K	I	R	G	A	G	A	E	Y	C	V	L	D	D	I	L	P	P	E	P	S	Y	M	E	A	Q	K	L	V	D			
UniRef90_F7YIM7	E	K	L	G	Y	V	K	K	L	T	F	E	F	E	R	V	G	V	S	C	V	V	F	N	D	I	L	V	P	D	P	T	Y	D	Q	V	E	A	G	L	H			
UniRef90_B1R0W7	K	M	G	T	V	K	L	T	D	I	L	E	T	E	R	V	L	D	I	K	F	E	I	F	N	D	I	V	T	G	D	P	S	T	D	T	M	I	Q	S	A	G	V	S
UniRef90_C8VWZ0	V	D	L	G	Y	V	D	K	V	L	Y	H	L	T	N	K	R	S	N	K	V	A	E	I	F	S	E	V	I	T	G	D	P	S	L	E	T	V	Q	S	K	G	V	E
UniRef90_UPI00042571CF	K	R	N	G	V	Y	D	D	V	M	K	Q	L	N	D	N	V	D	A	T	V	V	F	E	L	T	G	V	V	P	D	P	R	L	T	T	V	R	K	G	V			

UniRef90_U2U7U7	L	L	K	A	F	E	P	D	C	I	A	I	G	G	G	S	A	M	D	A	G	K	I	M	W	S	M	Y	E	N	P	E	K	F	E	D	M	Y				
UniRef90_C8S000	V	V	L	A	G	K	H	D	G	V	I	C	F	G	G	S	S	A	L	D	A	G	K	M	I	A	L	M	A	H	Q	P	E	K	D	I	D	D	W	Y		
UniRef90_A6NPU7	A	Y	K	K	S	G	A	D	G	Y	M	T	I	G	G	G	S	S	M	D	T	G	K	A	I	G	I	I	N	Q	P	E	K	D	V	R	S	L	E	G		
UniRef90_V2XLC5	L	C	K	K	E	N	N	I	D	V	I	L	S	V	G	G	G	S	T	L	D	C	S	K	A	I	A	S	G	V	Y	E	G	D	D	L	W	E	M	V		
UniRef90_E0E1G2	L	L	K	E	N	Q	L	G	V	I	L	A	S	V	G	G	G	S	I	D	C	S	K	V	I	A	A	G	V	K	Y	D	G	D	P	W	D	L	V	L		
UniRef90_UPI0003630A95	A	M	R	E	F	G	P	D	T	I	V	A	L	G	G	G	S	S	P	M	D	A	A	K	I	M	W	L	M	Y	E	H	P	F	D	I	R	K	R	A	Y	
UniRef90_F0PAF9	M	M	V	D	F	Q	P	D	T	V	I	A	L	G	G	G	S	S	A	M	D	A	A	K	G	M	W	M	F	Y	E	H	P	D	T	E	F	F	G	A	K	
UniRef90_B9Y6P9	Q	Y	Q	A	E	H	C	D	F	L	I	A	L	G	G	G	S	S	P	I	D	S	M	K	A	I	A	M	M	S	A	D	P	D	R	P	L	N	S	Y	M	
UniRef90_UPI00047AE89F	L	A	R	Q	Q	Q	P	D	L	I	L	A	V	G	G	G	S	S	V	L	D	C	A	K	V	V	A	G	A	L	Y	E	G	D	F	Y	E	H	F	F	V	
UniRef90_D2QA70	L	A	K	D	R	Q	G	D	V	V	I	G	L	G	G	G	S	S	T	M	D	A	A	K	G	I	A	F	M	A	E	N	G	G	A	V	S	E	Y	I	Y	
UniRef90_S9RBT1	A	M	E	R	G	T	E	A	I	V	I	V	L	G	G	G	S	S	A	T	D	V	A	K	A	V	G	I	V	A	T	N	E	G	G	A	I	A	D	Y	E	G
UniRef90_B0VFL1	A	F	L	Q	N	N	C	D	F	V	I	G	L	G	G	G	S	S	P	V	D	S	A	K	A	I	S	L	A	A	N	S	L	N	R	D	E	M	Y			
UniRef90_J0GAS7																																										
UniRef90_R9LVX4	Q	C	K	A	A	K	A	D	F	I	I	A	A	G	G	G	S	S	V	M	D	T	A	K	L	A	S	M	L	A	T	N	E	E	Y	G	V	K	E	L	D	G
UniRef90_F7YIM7	Q	Y	R	L	E	K	C	Q	G	V	V	A	I	G	G	G	S	S	I	D	C	A	K	V	I	A	A	C	A	T	N	R	K	S	I	K	R	L	V	G		
UniRef90_B1R0W7	A	Y	K	D	A	G	C	D	F	C	I	A	I	G	G	G	S	S	P	L	D	S	G	K	A	I	A	A	M	T	E	E	G	N	I	C	D	Y	M			
UniRef90_C8VWZ0	M	L	K	N	L	R	P	D	T	I	L	A	L	G	G	G	S	S	V	M	D	A	A	K	A	M	W	L	F	Y	E	H	P	D	V	E	F	D	W	L	Y	
UniRef90_UPI00042571CF	I	C	K	R	E	G	I	D	F	L	I	L	A	V	G	G	G	S	S	V	I	D	C	T	K	A	I	A	V	G	A	T	Y	E	G	D	V	W	D	L	I	T
UniRef90_R6MCR7	A	A	K	D	S	K	A	D	L	I	L	A	V	G																												

[illegible]

UniRef90_U2U7U7	I	L	T	D	M	P	N	M	A	I	V	D	T	D	N	M	M	S	Q	P	K	G	L	T	A	A	S	G	V	D	V	L	T	H	C	L	E	S	F	V	S			
UniRef90_C8S000	I	F	H	P	D	N	V	V	T	I	C	D	P	A	L	T	V	T	G	M	P	K	F	L	T	A	G	T	G	M	D	A	L	T	H	C	L	E	A	Y	C	S		
UniRef90_A6NPU7	C	V	D	T	P	N	D	V	I	A	I	V	D	P	A	L	M	M	S	T	G	M	P	K	G	L	T	A	G	T	G	M	D	A	L	T	H	C	L	E	A	Y	T	T
UniRef90_V2XLC5	M	Y	T	T	Y	P	S	V	S	I	C	D	P	T	Y	T	F	T	V	S	K	Y	Q	T	A	A	G	T	S	A	D	I	M	S	H	I	M	E	G	Y	F	T		
UniRef90_E0E1G2	T	G	M	P	K	A	S	V	I	L	I	D	P	E	Y	T	T	Y	T	V	P	A	K	H	T	A	A	G	T	A	D	L	I	S	H	T	F	E	N	Y	F	T		
UniRef90_UPI0003630A95	L	A	D	Y	P	N	V	A	I	V	I	D	P	M	L	P	M	N	L	V	P	A	K	V	T	A	D	S	G	F	D	A	L	T	H	A	I	E	A	Y	V	S		
UniRef90_F0PAF9	L	A	D	Y	P	D	V	A	I	V	I	D	P	Q	F	V	M	S	V	P	A	S	V	T	A	D	T	G	M	D	V	L	T	H	A	I	E	A	Y	V	S			
UniRef90_B9Y6P9	G	S	L	I	P	D	L	A	I	V	I	D	P	Q	F	T	M	T	A	P	K	G	V	T	S	A	T	G	I	D	A	L	T	C	H	A	I	E	A	Y	T	S		
UniRef90_UPI00047AE89F	M	F	S	E	C	V	Y	S	I	L	N	P	E	L	T	Y	T	V	P	S	K	E	Q	M	V	S	G	I	C	D	I	L	S	H	I	L	E	V	Y	M	S			
UniRef90_D2QA70	L	R	S	P	A	L	V	A	I	V	I	D	P	D	L	M	R	T	M	P	S	H	V	I	A	A	N	G	C	D	M	L	C	H	C	H	I	E	A	F	T	A		
UniRef90_S9RBT1	I	R	H	P	A	T	H	A	I	V	I	D	P	A	A	V	A	T	A	P	A	S	V	I	A	A	G	V	D	A	F	V	I	H	A	F	E	S	Y	L	S			
UniRef90_B0VFL1	D	L	A	F	P	T	L	A	V	L	I	D	P	K	Y	T	L	T	L	P	K	V	T	L	H	T	A	G	V	D	A	F	V	I	H	A	L	E	G	L	Y	S		
UniRef90_J0GAS7	I	V	D	K	H	V	I	S	V	N	I	D	P	L	L	M	V	G	M	P	K	T	K	I	A	A	A	T	G	M	D	A	L	T	H	A	I	E	A	Y	V	S		
UniRef90_R9LVX4	I	V	N	G	D	M	I	A	L	I	I	D	P	V	A	M	V	K	D	L	P	K	T	I	A	A	A	T	G	V	D	A	L	T	H	A	I	E	A	Y	V	S		
UniRef90_F7YIM7	I	T	D	P	P	L	I	A	A	L	I	D	P	M	L	M	M	K	D	L	P	T	H	I	T	A	A	Q	T	G	L	D	A	L	T	H	A	V	E	A	F	I	S	
UniRef90_B1R0W7	E	A	L	L	P	D	L	A	I	I	I	D	P	Y	K	F	S	M	T	S	P	K	S	V	I	A	A	T	G	M	D	A	L	T	H	A	V	E	A	Y	A	S		
UniRef90_C8VWZ0	L	A	D	Y	P	D	V	A	I	I	I	D	P	S	E	F	T	Y	S	V	P	P	D	L	T	A	D	T	G	I	D	V	L	T	H	A	L	E	A	Y	V	S		
UniRef90_UPI00042571CF	W	S	S	P	H	T	F	S	V	L	D	P	E	Y	T	F	S	V	P	Q	D	Q	T	I	Y	G	I	V	D</															

[illegible]

[illegible]

UniRef90_U2U7U7	V	M	R	Y	N	S	A	E	R	P	A	K	M	G	T	F	P	Q	Y	F	L	E	K	I	Y	D	L	F	D	H	V	G	V	K	R	E	Y	N	V	D			
UniRef90_C8S000	V	L	D	F	N	R	Q	E	E	E	E	K	F	D	R	L	A	A	E	A	M	G	D	A	V	M	Q	L	R	S	V	D	V	G	I	P	A	N	K	L	G	M	Q
UniRef90_A6NPU7	V	M	E	F	N	Q	E	Y	T	G	E	K	F	D	R	A	L	A	E	A	M	G	D	A	V	M	Q	L	R	S	V	D	V	G	I	P	A	N	K	L	G	M	Q
UniRef90_V2XLC5	W	M	R	H	I	L	K	K	D	P	S	V	T	A	R	F	A	Q	K	G	I	D	A	L	E	F	F	F	K	K	A	G	I	P	T	E	V	L	N	I	N		
UniRef90_E0E1G2	W	M	R	Y	I	L	N	K	D	D	L	D	K	Y	E	L	A	N	K	A	I	D	L	T	Q	D	F	F	C	K	E	L	N	R	D	R	Y	G	I	N	D		
UniRef90_UPI0003630A95	V	I	R	H	N	G	T	V	A	P	R	K	I	Q	E	I	A	K	M	L	A	G	E	S	Y	A	K	A	V	I	E	S	L	R	D	R	Y	G	I	N	D		
UniRef90_F0PAF9	I	I	R	Y	N	A	K	D	P	S	K	H	A	M	F	P	K	Y	A	L	A	G	E	N	A	V	A	D	L	G	K	S	V	N	G	I	P	T	E	V	L	N	D
UniRef90_B9Y6P9	C	M	N	Y	V	K	D	G	A	L	D	R	F	A	D	L	A	R	Y	C	A	T	E	N	V	S	A	L	L	J	A	R	L	N	G	I	P	T	E	V	L	N	D
UniRef90_UPI00047AE89F	Y	Y	R	L	L	L	P	Y	A	P	W	R	F	A	R	F	A	Q	N	V	W	G	I	M	E	D	F	F	R	A	L	G	A	P	S	R	E	L	N	G	I	D	
UniRef90_D2QA70	A	I	E	A	T	Y	Q	C	N	R	F	K	Y	G	R	I	A	E	L	G	G	F	T	A	R	E	L	J	A	E	D	L	S	V	F	R	D	I	G	I	E		
UniRef90_S9RBT1	V	A	E	F	N	F	J	A	A	P	D	R	Y	A	Q	V	A	E	A	M	G	E	D	V	R	A	G	L	C	A	E	D	L	S	V	F	R	D	I	G	I	E	
UniRef90_B0VFL1	I	M	E	L	Y	Y	P	A	I	Q	Q	E	L	D	L	F	S	Y	L	Q	D	N	F	Y	T	W	L	K	S	I	L	P	F	E	R	K	I	D	F	S			
UniRef90_J0GAS7	V	Q	R	F	N	S	K	V	A	A	E	L	R	D	C	A	S	A	M	G	V	N	T	E	N	M	T	A	D	L	S	G	L	K	A	E	L	G	V	R			
UniRef90_R9LVX4	V	M	R	F	N	E	P	A	C	R	D	K	F	E	K	C	S	E	A	L	I	A	R	L	E	E	I	V	R	H	L	H	I	P	T	Q	E	L	G	V	R		
UniRef90_F7YIM7	V	L	E	Y	S	K	E	A	A	K	D	K	D	S	M	K	A	D	A	F	I	G	Y	V	K	E	L	N	H	T	L	H	I	P	T	Q	E	L	G	V	R		
UniRef90_B1R0W7	C	L	S	Y	V	I	D	G	S	Y	E	K	F	A	N	I	A	R	V	I	N	E	D	N	D	N	L	S	D	E	I	P	T	L	M	K	E	Y	G	I	N		
UniRef90_C8VWZ0	V	I	E	Y	N	A	Q	K	A	P	E	K	Y	R	R	A	A	Q	L	G	G	A	V	R	L	L	S	M	A	E	I	N	L	P	M	K	E	Y	G	I	N		
UniRef90_UPI00042571CF	W	L	H	H	V	I	E	E	D	P	S	R	V	K	Q	L	A	T	N	V	A	E	A	L	R	A	F	W	D	S	I	G	A										

UniRef90_U2U7U7	E	D	T	L	D	D	M	A	E	Q	A	F	N	D	Q	C	T	G	A	N	P	R	Y	P	L	I	S	E	I	A	S	L	Y	M	D	A		
UniRef90_C8S000	F	A	D	L	D	M	L	T	D	M	A	L	E	D	A	P	S	C	G	G	N	P	V	V	M	T	K	K	N	T	R	A	L	F	E	A	C	M
UniRef90_A6NP07	E	D	E	L	E	F	L	T	A	Q	S	A	A	A	D	A	C	A	P	G	N	P	R	E	A	T	V	E	D	F	K	S	L	F	R	Q	L	M
UniRef90_V2XLC5	D	E	N	F	G	K	M	A	E	H	A	N	Q	L	G	R	L	T	K	A	Y	V	V	P	L	T	D	E	D	I	V	S	L	Y	K	A	C	L
UniRef90_E0E1G2	D	E	N	F	E	V	M	A	K	H	A	V	K	G	S	S	I	Q	G	F	V	N	L	E	A	E	D	I	V	K	I	Y	Q	A	A	L		
UniRef90_UPI0003630A95	E	E	A	L	P	Q	Q	A	M	N	A	Y	A	D	Q	C	A	P	A	N	P	R	M	P	M	I	D	D	M	Q	R	L	M	R	Q	A		
UniRef90_F0PAF9	Q	E	T	L	D	R	M	A	E	L	A	Y	E	D	Q	C	T	T	A	N	P	K	E	P	L	I	S	E	L	K	Q	I	L	L	D	A		
UniRef90_B9Y6P9	R	N	Q	L	E	K	M	A	H	D	A	A	V	S	G	S	P	A	N	T	R	K	V	I	T	E	E	A	L	I	A	L	Y	K	O	A		
UniRef90_UPI00047AE89F	E	R	A	L	D	A	I	A	D	S	C					R	L	L	P	G	S	Y	H	R	V	T	H	A	E	L	R	A	L	R	K	T	L	
UniRef90_D2QA70	K	K	D	I	P	W	L	A	Q	N	A	Q	K	P	G	N	L	V	N	T	P	G	V	T	T	S	E	S	L	E	K	L	Y	E	S	M	L	
UniRef90_S9RBT1	E	T	A	L	E	E	I	A	D	R	C	F	A	L	D	Y	N	R	W	N	P	R	Q	T	S	R	E	E	D	F	L	Q	L	R	R	G	F	
UniRef90_BoVFL1	E	D	F	I	D	K	A	I	P	Q	I	M	S	R	N	M	A	L	N	P	L	P	V	T	E	Q	Q	V	R	T	L	L	E	N				
UniRef90_J0GAS7	E	E	D	I	P	R	L	A	S	S	A	L	K	D	A	C	S	L	T	T	N	P	R	K	A	T	H	E	E	I	A	I	Y	E	A	L		
UniRef90_R9LVX4	S	E	D	L	P	Q	L	V	S	G	G	M	E	A	R	L	L	V	N	N	R	R	E	I	T	P	A	D	A	A	E	I	Y	R	Q	L	L	
UniRef90_F7YIM7	P	E	H	I	P	E	L	A	K	Q	A	F	R	E	A	F	W	Y	P	A	P	K	Y	M	Q	Q	T	D	C	E	A	I	F	R	K			
UniRef90_B1R0W7	K	D	E	F	D	K	M	A	E	D	A	M	N	S	G	S	P	S	N	T	I	K	N	I	S	K	Q	D	L	T	I	N	I	Y	E	K		
UniRef90_C8VWZ0	R	K	D	I	P	S	L	A	E	K	A	F	A	D	Q	V	T	V	T	N	P	R	L	P	L	V	A	L	E	V	L	L	R	K	G	Y	G	
UniRef90_UPI00042571CF	D	E	D	F	D	S	I	V	E	K	T	L	I	K	P	G	V	G	T	Y	V	E	M	N	G	E	R	V	L	D	I	L	Q	R	S	L		
UniRef90_R6MCR7	E	A	M	I	D	G	I	A	D	A	T	F	I			L	K	G	G	Y	K	V	L	T	K	D	S	E	V	K	A	L	L	K	A	S	F	
UniRef90_X5A1N1	P	K	M	D	E	A	L	A	D	K	A	F	E	D	Q	C	T	T	A	N	P	K	V	L	P	L	V	S	E	L	A	D	V	Y	R	N	A	

[illegible]

UniRef90_R5XSJ9	T	L	R	S	F	E	P	D	V	I	A	L	G	G	G	S	P	I	D	A	G	K	I	M	W	L	M	Y	E	H	P	M	D	I	R	K	R	I	F			
UniRef90_R6PIY8	L	C	K	K	E	G	V	D	F	I	A	V	G	G	G	S	V	I	D	S	S	K	A	I	G	V	G	V	A	N	G	E	D	V	W	F	K	Y	F			
UniRef90_R5AN75	I	A	R	A	H	K	A	D	L	L	A	V	G	G	G	S	V	L	D	A	K	L	F	A	V	R	L	T	N	G	E	Q	P	L	R	D	W	L	G			
UniRef90_UPI00046311E4	E	I	A	P	A	R	P	D	A	I	L	A	V	G	G	G	S	V	L	D	A	K	L	F	A	V	R	L	T	N	G	E	Q	P	L	R	D	W	L	G		
UniRef90_UPI0002DAC69F	V	F	V	E	G	Q	H	D	G	V	I	A	V	G	G	G	S	A	L	D	C	A	K	A	I	A	L	S	A	C	Q	S	H	P	L	R	D	W	N	W		
UniRef90_MARTA3	M	M	R	D	F	K	P	D	T	I	L	A	V	G	G	G	S	A	M	D	A	A	K	V	M	W	L	M	Y	E	H	P	E	I	A	F	S	D	V	R		
UniRef90_G7Q9H2	I	Y	V	R	E	R	A	D	V	I	L	A	V	G	G	G	S	P	M	D	A	A	K	G	I	A	T	I	V	G	N	G	F	R	I	L	E	D	Y	E	G	
UniRef90_D4M6G1	L	C	K	K	E	G	V	D	F	I	L	P	I	G	G	G	S	A	L	D	C	A	K	A	I	A	Y	G	L	A	N	D	F	E	L	S	D	L	L	M		
UniRef90_R6BY24	L	C	K	E	H	K	I	D	V	L	L	A	V	G	G	G	S	V	L	D	C	A	K	A	I	C	A	G	A	C	Y	E	G	E	P	W	D	L	I	T		
UniRef90_A2P3B4	K	V	R	E	H	K	V	S	L	I	L	A	V	G	G	G	S	V	L	D	C	A	K	G	I	A	Y	C	E	G	Q	D	P	S	F	Q	K	Y	W	V	E	
UniRef90_UPI00046A98D7	K	V	S	K	F	D	F	D	T	I	V	A	I	G	G	G	S	V	M	D	A	A	K	L	I	S	L	V	L	H	T	D	P	Y	S	I	K	D	L	I	D	
UniRef90_R5HLZ7	L	Y	R	Q	A	G	C	D	S	L	I	A	V	G	G	G	S	V	I	D	T	A	K	G	V	G	M	V	L	A	Q	A	G	S	D	L	L	D	S	C		
UniRef90_D1BVV1	L	M	R	D	H	R	P	D	T	I	L	A	A	L	G	G	G	S	P	M	D	A	A	S	K	V	M	W	L	K	Y	E	H	P	E	I	D	F	A	D	L	R
UniRef90_K1TPM3	F	A	K	E	N	G	C	D	V	I	V	A	A	G	G	G	S	P	L	D	A	A	K	G	I	G	M	L	L	T	N	G	K	V	T	D	Y	E	K			
UniRef90_UPI00047E8240	I	C	K	K	E	G	V	D	F	I	L	S	V	G	G	G	S	C	I	D	S	S	K	A	I	A	I	G	T	L	Y	D	G	D	F	W	D	F	Y	G		
UniRef90_G5KFH9	M	M	R	D	F	Q	P	D	T	I	L	A	L	G	G	G	S	P	M	D	A	A	K	G	M	W	L	M	Y	E	Q	P	D	I	D	F	S	D	L	F		
UniRef90_D4ZXG9	L	M	N	S	Y	Q	P	D	T	I	L	A	F	G	G	G	S	P	M	D	A	A	K	I	M	W	L	M	Y	E	H	P	M	D	I	R	K	R	V	Y		
UniRef90_E1QEU5	L	G	R	D	N	A	V	D	V	V	V	G	I	G	G	G	S	A	L	D	L	A	K	A	A	G	V	L	I	T	N	G	Q	Q	C	T	D	Y	V	G		
UniRef90_D2Z5N9	L	C	R	N	E	S	V	D	L	V	L	A	V	G	G																											

UniRef90_R5XSJ9	E	F	P	Q	L	G	E	K	A	V	M	V	A	I	P	T	T	S	G	T	G	S	E	V	T	P	F	S	I	I	T	D	E	H	E	G	V	K	Y	A					
UniRef90_R6PIY8	R	K	R	T	P	O	S	C	M	P	I	V	G	C	V	L	T	I	A	A	G	S	E	M	N	A	G	S	V	I	T	T	N	T	E	E	T	L	Q	K	R	G			
UniRef90_R5AN75	V	R	F	P	S	C	E	I	T	P	V	I	G	C	V	L	T	I	M	V	A	G	T	G	S	E	M	N	A	G	S	V	I	T	T	N	T	E	E	T	L	Q	K	R	G
UniRef90_UPI00046311E4	I	D	K	I	A	V	P	G	V	P	L	I	A	V	P	T	T	A	G	T	G	S	E	V	T	P	R	N	A	I	V	T	L	P	E	D	E	A	K	R	K	V	G		
UniRef90_UPI0002DAC69F	L	R	A	N	P	D	A	I	A	P	L	I	A	V	P	T	T	A	G	T	G	S	E	V	T	P	R	N	A	I	V	T	L	H	E	G	D	Q	K	R	K	V	I		
UniRef90_M4RTA3	E	K	P	P	L	G	E	K	A	K	L	V	C	I	P	T	T	S	G	T	G	S	E	V	T	P	Y	A	V	I	T	T	D	H	K	A	R	G	Y	K	Y	P			
UniRef90_G7Q9H2	A	N	R	I	M	R	P	L	P	M	I	F	L	P	P	T	T	A	G	T	G	S	E	D	I	S	Q	F	C	I	P	T	D	V	A	R	Q	V	K	M	S				
UniRef90_D4M6G1	G	K	V	K	T	D	K	L	A	P	I	G	C	I	P	T	T	A	A	T	G	S	E	T	S	N	S	M	V	I	T	I	E	E	K	R	S	Y	N	H					
UniRef90_R6BY24	Y	R	V	K	A	K	E	A	L	P	L	V	D	I	L	T	I	A	A	T	G	S	E	E	Y	D	S	G	S	C	I	P	S	R	T	E	A	T	N	D	K	V	G		
UniRef90_A2P3B4	F	Q	D	V	D	H	E	I	V	P	P	L	V	C	I	P	T	T	M	V	G	T	G	S	E	M	N	G	S	V	I	T	H	E	A	M	K	D	V	K	A	G			
UniRef90_UPI00046A98D7	D	P	T	K	V	S	K	R	C	I	S	T	V	L	I	P	T	T	T	V	G	T	G	S	E	A	T	I	N	A	I	V	T	I	P	E	K	D	V	K	F	G			
UniRef90_R5HLZ7	E	V	L	P	R	G	A	H	V	P	F	V	A	V	P	T	T	T	A	G	T	G	S	E	A	T	L	V	A	V	V	I	A	N	P	A	K	Q	V	K	Y	M	E		
UniRef90_D1BVV1	E	K	P	T	L	G	K	L	A	Q	L	V	C	I	P	T	T	S	G	T	G	A	E	V	T	R	F	A	V	I	T	S	D	T	H	K	T	G	Y	K	Y	P			
UniRef90_K1TPM3	T	A	P	E	K	E	S	L	P	L	I	C	A	I	P	T	T	T	A	G	T	G	S	E	A	T	R	Y	S	V	I	T	D	K	T	D	R	N	I	K	M	L			
UniRef90_UPI00047E8240	T	G	K	P	V	E	K	A	L	P	I	G	T	I	L	T	I	A	A	A	G	S	E	E	G	S	G	A	S	V	I	T	K	E	A	G	M	L	K	R	D				
UniRef90_G5KHF9	R	F	P	K	L	G	K	K	A	K	Y	I	G	I	P	T	T	T	S	G	T	G	S	E	V	T	P	F	A	V	V	I	T	S	D	K	A	N	N	R	K	Y	P		
UniRef90_D42XG9	A	L	P	E	L	G	N	K	A	I	M	V	A	I	P	T	T	T	S	G	T	G	S	E	V	T	P	F	A	V	V	I	T	D	D	R	T	G	I	K	Y	P			
UniRef90_E1QEU5	L	E	L	V	K	T	P	G	K	P	V	I	C	I	P	T	T	A	G	T	G	S	E	V	T	T	F	T																	

UniRef90_R5XSJ9	V	A	D	Y	P	S	M	A	I	I	D	S	D	L	V	Q	T	M	P	K	G	L	C	S	A	S	G	I	D	I	L	T	H	A	L	E	S	Y	V	S				
UniRef90_R6PIY8	C	N	S	D	V	C	F	A	I	L	N	P	E	Y	T	M	T	L	P	P	K	Y	Q	T	M	S	G	I	Y	D	I	I	M	N	H	I	C	M	E	R	Y	F	N	
UniRef90_R5AN75	H	V	F	M	P	R	F	T	I	L	N	P	E	Y	T	M	T	L	P	P	K	Y	Q	M	V	S	G	I	Y	D	I	I	M	N	H	I	C	M	E	R	Y	F	N	
UniRef90_UPI00046311E4	I	V	S	R	H	L	M	V	L	I	D	A	T	L	T	V	S	L	P	P	K	A	I	T	A	A	T	G	M	D	A	F	V	H	A	L	E	A	S	F	I	S		
UniRef90_UPI0002DAC69F	I	F	H	P	N	M	H	V	A	I	L	D	P	E	L	T	T	V	L	P	P	R	L	I	T	A	A	T	G	M	D	A	L	T	S	H	A	L	E	A	S	F	I	S
UniRef90_MARTA3	I	T	D	Y	P	S	V	A	I	V	D	P	V	L	A	R	T	Q	P	P	R	R	L	A	C	D	S	A	I	D	A	F	A	H	A	V	E	A	S	Y	L	S		
UniRef90_G7Q9H2	I	L	S	R	P	N	I	S	I	L	D	P	L	V	L	T	T	K	S	P	E	E	L	I	A	S	A	I	D	A	F	A	H	A	V	E	A	S	Y	L	S			
UniRef90_D4M6G1	D	C	A	R	P	L	F	A	C	M	N	P	E	L	T	T	Y	T	L	P	P	V	Y	Q	T	A	S	G	A	S	D	I	M	M	H	A	L	E	M	E	R	Y	F	T
UniRef90_R6BY24	Y	L	D	Y	P	R	V	S	I	L	D	P	E	Y	T	F	S	V	L	P	P	K	Y	Q	T	A	S	G	T	A	D	A	I	N	H	V	M	E	Q	Y	F	C		
UniRef90_A2P3B4	R	V	F	P	K	F	S	I	L	N	P	E	Y	T	F	T	V	L	P	P	K	Y	Q	M	V	S	G	V	F	D	T	M	S	H	L	M	E	Q	Y	F	S			
UniRef90_UPI00046A98D7	I	V	S	D	E	M	L	V	L	I	D	P	V	N	N	V	K	T	L	P	P	K	Y	S	I	M	A	S	T	S	A	V	D	A	L	S	H	C	V	E	A	T	S	
UniRef90_R5HLZ7	F	L	S	Y	H	D	V	A	V	L	D	P	R	M	T	E	T	L	P	P	P	R	I	L	A	S	T	S	G	F	D	A	L	T	V	H	A	L	E	A	F	T	C	
UniRef90_D1BVV1	L	A	D	Y	P	S	V	A	I	L	D	P	V	L	T	A	S	M	P	P	A	K	L	A	V	D	I	T	G	M	D	A	L	T	H	A	L	E	A	S	F	V	S	
UniRef90_K1TPM3	L	S	T	D	P	K	A	A	I	L	D	F	A	I	T	T	K	S	L	P	P	S	F	M	T	A	A	T	G	M	D	A	L	T	H	A	L	E	A	S	Y	I	N	
UniRef90_UPI00047E8240	D	K	I	R	P	R	F	S	I	L	N	P	E	A	L	T	T	T	L	P	P	P	Y	Q	T	A	C	G	A	T	D	I	M	A	H	I	F	E	R	Y	F	T	S	
UniRef90_G5KfH9	L	A	D	Y	P	T	I	A	I	V	D	P	E	A	L	T	V	E	S	L	P	P	G	F	I	L	T	A	A	T	G	M	D	V	L	T	H	A	L	E	A	Y	T	S
UniRef90_D4ZXG9	L	A	D	Y	P	N	M	A	I	L	D	P	E	L	T	T	L	N	M	P	P	G	F	I	L	T	A	A	T	G	M	D	V	L	T	H	A	L	E	A	Y	T	S	
UniRef90_E1QEU5	I	N	L	Y	P	H	M	A	I	L	D	P	E	L	T	T</																												

[illegible]

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[illegible]

UniRef90_R5XSJ9	D	E	D	F	K	K	A	M	E	L	A	F	D	D	Q	C	T	G	S	N	P	R	Y	P	L	L	K	E	I	R	K	L	Y	E	L	A		
UniRef90_R6PIY8	E	E	Q	M	Q	E	S	I	A	M	E	K	C	V	A	Y	G	G	F	A	G	K	V	R	K	L	Y	A	E	D	V	A	N	I	Y	R	M	A
UniRef90_R5AN75	E	D	M	L	Q	E	S	I	A	D	V	T	L	I				F	L	K	G	V	H	V	P	N	R	A	E	I	I	E	I	L	R	E	S	L
UniRef90_UPI00046311E4	D	E	H	V	D	A	L	A	V	A	S	K	T	R	L	L	G	N	N	P	K	T	L	T	L	D	M	R	A	I	L	Y	R	R	L	L		
UniRef90_UPI0002DAC69F	V	E	D	A	A	L	V	G	Q	M	S	V	K	D	P	S	A	G	N	P	R	I	A	L	S	A	E	E	Y	S	L	L	F	M	N	A	V	
UniRef90_M4RTA3	E	D	T	I	D	R	I	G	M	R	A	Y	E	D	Q	C	T	P	A	N	P	R	I	P	L	I	E	D	M	E	D	I	A	I	J	A	A	
UniRef90_G7Q9H2	S	S	C	L	E	T	L	A	K	T	A	V	N	D	A	C	T	L	T	N	P	R	P	A	S	W	E	S	L	L	G	V	C	Q	E	A		
UniRef90_D4M6G1	D	D	Q	I	K	E	M	A	E	K	C	V	A	G	G	T	V	T	N	P	R	Q	P	L	N	S	K	D	I	I	N	I	Y	K	M	S		
UniRef90_R6BY24	E	S	G	L	S	E	M	A	H	H	I	A	E	N	E	G	L	E	N	A	W	A	P	L	K	E	E	D	I	L	A	I	L	K	A	S	L	
UniRef90_A2P3B4	K	A	M	L	P	E	I	A	Q	S	T	I				F	G	N	G	Y	K	T	L	T	K	E	E	V	L	N	I	L	E	A	C			
UniRef90_UPI00046A98D7	S	D	D	L	D	F	L	V	D	S	A	L	Q	Q	R	L	L	D	H	N	R	R	K	L	T	R	E	E	V	E	N	I	Y	K	S	V	M	
UniRef90_R5HLZ7	Q	E	D	F	E	A	V	A	R	T	A	L	N	D	G	A	I	I	V	N	P	A	E	A	D	Y	D	E	I	L	L	G	I	L	K	E	V	W
UniRef90_D1BVV1	E	Q	E	L	D	A	L	A	M	R	A	Y	E	D	Q	C	A	P	A	N	P	R	L	P	M	L	Q	D	M	K	D	I	M	V	J	A	A	
UniRef90_K1TPM3	E	E	D	I	P	I	L	V	E	K	L	G	L	G	D	G	K	K	P	G	F	V	D	L	S	S	A	D	V	A	E	I	L	H	I	A		
UniRef90_UPI00047E8240	E	K	S	L	H	E	I	A	L	L	A	Y	E	D	Q	C	S	T	A	N	P	R	L	P	L	V	A	D	M	E	E	I	M	A	D	A		
UniRef90_G5KFH9	E	K	E	L	P	N	L	A	N	Q	A	F	D	D	Q	C	T	A	N	P	R	Y	P	L	L	G	D	M	E	E	I	Y	A	T	A			
UniRef90_D4ZXG9	Q	A	S	V	P	E	M	A	K	K	A	M	T	A	R	P	I	A	N	N	P	R	K	V	C	A	E	D	L	E	E	I	Y	H	O	A	F	G
UniRef90_E1QEUE5	D	D	R	L	E	E	M	A	E	K	S	N	W	N	G	P	V	Y	Q	Q	F	V	P	I	T	T	E	K	A	L	E	I	L	K	L	C	R	G
UniRef90_D2Z5N9	R	S	D	L	R	S	I	A	E	A	S	G	T	R	L	L	R	N	N	P	R	E	L	S	V	D	I	E	A	I	E	Y	Q	A	A			
UniRef90_R4UWQ0	E	D	M	I	D	G	I	A	D	G	T	F	I			L	E	G	G	Y	K	V	L	D	H	E	E	I	V	T	I	L	K	E				

UniRef90_UPI0002490482	Y	K	F	G	T	S	N	K	A	K	F	V	A	I	P	T	T	S	G	T	G	S	E	M	T	P	F	A	S	V	I	T	D	S	K	T	H	V	K	Y	P			
UniRef90_E2ZBB7	R	E	K	P	S	E	N	I	K	V	F	V	G	C	A	V	L	T	M	V	G	T	S	E	M	N	T	K	N	A	S	V	I	T	N	T	A	Q	K	R	K	V	G	
UniRef90_X1QU80	G	R	K	F	Q	H	K	P	L	P	F	I	A	I	P	T	T	T	A	G	T	G	S	E	A	T	K	N	A	S	V	I	T	N	T	A	K	L	G	L	K	K	S	
UniRef90_K5I9G7	E	T	S	V	L	Q	P	R	L	P	L	I	A	I	P	T	T	T	A	G	T	G	S	E	E	T	N	N	V	T	G	V	I	T	D	A	V	S	G	R	K	Q	H	
UniRef90_F8DA01	M	G	N	V	P	G	P	G	R	P	T	V	L	L	P	T	T	T	A	G	T	G	S	E	E	T	V	T	H	I	L	G	V	E	A	D	K	E	K	V	V	Y	S	
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UniRef90_G9YUE7																																												
UniRef90_MOQQJ9	I	D	K	A	P	R	P	L	P	P	L	V	A	I	P	T	T	T	A	G	T	G	S	E	D	V	S	Q	F	A	I	V	I	T	N	D	A	E	R	R	T	K	I	T
UniRef90_R9B7Y6	I	N	N	A	K	S	P	R	L	P	P	L	L	I	P	T	T	T	A	G	T	G	S	E	E	T	V	T	P	I	S	I	V	I	T	T	G	E	K	M	G	I	V	S
UniRef90_R6KBC9	H	E	R	K	A	E	K	P	L	P	V	A	S	V	L	T	I	A	A	S	T	G	S	E	E	T	V	S	N	S	A	I	V	I	T	N	E	D	G	E	K	R	S	
UniRef90_Q0KBD6	I	E	R	I	T	D	K	A	A	P	L	I	A	V	P	T	T	T	A	G	T	G	S	E	E	V	T	N	S	R	G	A	I	I	L	L	D	D	G	R	K	F	H	S
UniRef90_C0QA69	A	N	R	I	E	H	P	L	P	P	M	I	F	I	P	S	T	T	A	S	S	T	G	S	E	D	I	S	Q	F	A	I	I	T	D	M	E	R	Q	I	K	M	S	
UniRef90_UPI0002627465	S	Y	P	R	L	N	C	L	P	P	L	I	A	V	P	T	T	T	A	G	T	G	S	E	E	A	T	K	V	M	V	I	I	T	D	A	E	T	D	Y	K	M	H	
UniRef90_K0HTD3	I	E	R	I	T	A	T	V	P	V	V	A	I	V	P	T	T	T	A	G	T	G	S	E	E	V	T	G	R	G	A	I	I	L	D	D	G	R	K	V	G	I		
UniRef90_E5VHX2	T	G	E	K	V	P	K	K	H	P	L	I	A	I	P	T	T	T	A	G	T	G	S	E	E	V	T	N	V	S	V	I	L	T	N	R	N	Q	G	I	K	A	P	
UniRef90_D0DBN6	P	R	I	V	D	L	P	A	L	P	L	C	C	A	I	P	T	T	T	A	G	T	G	S	E	E	V	T	R	A	A	S	V	I	T	D	A	T	T	H	E	K	L	G
UniRef90_I1E231	K	G	A	K	V	K	A	A	L	P	L	G	C	A	I	P	T	T	T	A	G	T	G	T	E	S	N	G	N	S	V	V	I	T	R	T	R	E	Y	E	Q	K	L	S
UniRef90_V9HH80	D	P	S	K	I	K	S	V	I	P	I	A	S	V	L	T	L	S	A	T	G	S	E	M																				

UniRef90_UPI0002490482	L	A	D	Y	P	D	V	A	I	V	D	P	Q	F	I	Q	T	V	P	K	R	T	I	A	F	S	G	L	D	V	L	S	H	A	T	E	S	Y	V	S		
UniRef90_E2ZBB7	R	N	F	C	P	R	F	A	V	L	N	P	E	Y	T	T	Y	T	P	Q	Y	Q	M	V	A	I	G	I	F	G	D	I	M	S	H	I	L	E	Q	Y	F	S
UniRef90_X1QU80	I	R	D	P	W	E	V	A	L	V	D	P	E	L	T	T	S	L	P	Q	H	I	T	A	M	I	C	G	G	D	A	L	T	H	A	I	E	S	Y	L	G	
UniRef90_K5I9G7	A	S	L	M	P	D	V	A	L	V	D	A	A	L	T	T	E	G	V	P	S	H	V	T	A	M	T	G	I	D	A	L	T	H	A	I	E	S	Y	S	A	
UniRef90_F8DA01	E	H	L	F	A	D	L	A	L	V	D	P	E	L	T	T	R	S	L	P	Q	V	A	A	M	T	G	M	D	A	L	T	H	A	I	E	S	Y	V	S		
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UniRef90_R9B7Y6	P	V	L	Y	A	D	V	A	I	L	D	A	T	F	T	Q	N	L	P	A	H	I	T	A	A	T	G	I	D	A	M	V	H	A	I	E	A	Y	T	T		
UniRef90_R6KBC9	Y	N	D	R	P	K	F	T	I	M	N	P	E	L	T	T	M	S	L	P	A	D	Y	Q	T	E	S	G	C	A	D	I	M	M	H	T	M	E	R	Y	F	T
UniRef90_Q0KBD6	W	H	L	L	P	K	S	A	V	C	D	P	E	L	T	L	G	L	P	A	G	L	T	A	A	T	G	M	D	A	I	A	H	C	I	E	A	T	F	L	A	S
UniRef90_C0QA69	I	I	S	R	P	N	I	S	I	D	P	T	L	T	T	T	K	S	R	E	N	L	M	I	A	A	A	V	D	A	L	I	A	H	A	I	E	A	H	V	S	
UniRef90_UPI0002627465	H	S	L	I	P	D	A	A	L	L	D	P	E	L	T	T	V	S	L	P	E	N	F	T	A	F	T	G	L	D	A	L	T	H	A	I	E	A	Y	L	S	
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UniRef90_E5VHX2	I	S	F	Y	P	Q	Y	A	I	V	D	P	T	L	T	W	S	M	P	A	D	L	T	A	A	S	A	G	I	D	V	L	S	H	A	L	E	G	Y	W	S	
UniRef90_D0DBN6	S	S	L	Q	P	K	V	A	L	L	D	V	E	L	T	T	L	S	C	P	Y	K	R	V	T	V	D	S	G	L	D	A	L	S	H	A	L	E	A	L	V	N
UniRef90_I1E231	F	S	S	P	P	Q	F	A	I	L	D	P	T	V	T	T	S	L	P	P	Y	K	Q	V	A	N	G	V	V	D	A	F	V	H	I	E	A	Q	Y	L	T	
UniRef90_V9HH80	P	E	M	A	P	K	F	S	I	L	D	P	T	Y	T	F	S	V	P	K	N	Q	T	A	A	G	T	A	D	I	M	S	H	I	F	E	V	Y	F	N		
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UniRef90_E22BB7	Y	Y	R	H	I	M	S	A	G	L	A	K	F	K	F	R	Y	A	E	N	V	W	D	R	M	E	A	Y	M	K	E	I	G	V	V	A	E	L	G	M	T			
UniRef90_X1QU80	V	M	E	Y	N	L	P	V	V	T	L	A	K	F	L	A	K	I	A	Q	S	L	G	V	N	L	V	E	K	I	K	E	V	L	S	Q	S	E	W	E	I	K		
UniRef90_K5I9G7	V	M	E	F	N	R	M	V	C	R	E	R	F	S	Q	I	A	G	R	A	L																							
UniRef90_F8DA01	V	M	E	Y	N	V	P	A	E	P	D	R	F	T	E	I	A	G	L																									
UniRef90_L0D7G6	A	L	R	F	N	R	E	A	A	T	P	R	L	A	D	L	A	A	R	L	L	G	E	H	L	I	T	L	N	T	E	L	V	L	I	R	S	P	L	D	G	L	R	
UniRef90_G9YUE7	V	M	S	F	N	A	G	C	A	E	Q	L	T	R	Q	S	A	L	E	I	R	T	S	A	R	R	Y	I	E	S	K	L	N	M	P	S	T	L	D	G	V	N		
UniRef90_MOQQJ9	V	I	R	Y	N	A	E	V	C	A	E	D	F	V	D	L	A	E	A	V	G	I	S	T	S	T	G	T	A	R	S	V	D	T	L	R	S	P	L	D	G	V	R	
UniRef90_R9B7Y6	V	L	K	F	N	A	P	N	A	K	H	L	Y	A	E	L	M	T	W	I	D	P	Y	C	D	L	F	I	D	H	M	Q	N	H	L	D	L	N	V	P				
UniRef90_R6KBC9	W	A	R	Y	V	Y	K	D	C	L	P	R	F	V	R	Y	A	V	N	V	I	E	T	M	E	K	F	Y	H	R	I	G	M	M	R	E	L	D	G	I	T			
UniRef90_Q0KB06	V	L	R	F	N	A	D	A	D	R	Y	A	R	L	R	A	M	H	L	G	A	D	I	G	A	V	I	A	Q	A	V	H	I	D	M	T	V	R	L	G	L	G	V	T
UniRef90_C0QA69	V	M	R	Y	N	L	C	E	C	T	D	K	L	A	E	I	A	L	A	G	I	E	K	L	E	R	Y	F	K	S	L	G	V	S	T	R	L	R	D	D				
UniRef90_UPI0002627465	V	I	R	F	G	L	E	S	A	V	D	R	Y	A	D	I	A	L	A	L	G	E	I	T	E	G	F	N	R	Q	F	K	I	L	E	A	G	G	I	F	G			
UniRef90_K0HTD3	V	V	R	F	N	R	E	S	D	E	K	L	D	R	L	A	Q	A	M	G	E	A	I	Q	D	M	S	R	R	L	R	L	P	A	G	L	I	D	G	V	T			
UniRef90_E5VHX2	F	I	R	L	N	R	E	L	T	S	Q	L	G	F	Y	D	Y	E	Q	F	A	D	A	V	Q	R	L	K	R	D	L	H	L	R	T	D	L	H	I	N	S			
UniRef90_D0DBN6	V	T	E	W	S	A	A	S	A	P	Q	A	Y	G	R	A	A	K	A	M	G	A	L	I	D	A	L	K	E	V	P	S	L	J	A	S	L	G	I	S				
UniRef90_I1E231	L	L	Q	Q	Q	R	G	K	R	A	K	L	Q	F	G	Q	R	V	W	Q	H	I	L	R	A	F	F	E	Q	M	G	V	P	T	T	R	L	G	I	S				
UniRef90_V9HH80	W	M	E	Y	V	L	D	D	N	S	K	E	K	Y	D	L	A	K	E	A	I	N	K	T	R																			

UniRef90_UPI0002490482 K A D F D K M A E L A Y E D Q C T V A N P K E P L I S D L K Q I L
UniRef90_E2ZBB7 E D M V E G I A E G V S I L K G G Y K E L T R Q E V I D L L K Q S M
UniRef90_X1QU80 K E D F S R L I K D A K G G S L N N N P R D I S D E N L I G M L Y K M T G

UniRef90_K5I9G7 E S E F D S F A D I A L E H H N I D R N P R R M E K E D I A D V F E E A
UniRef90_F8DA01 H D R I A E Y A R L A M L D H C H K T N P R S C S Q T D M E A L L D R A
UniRef90_L0D7G6 A A E F E M A E A A L A D R C T A T N P R S C T A E E I E Q I F R K A
UniRef90_G9YUE7 S D D L E Q L T A A H A L V D S C M T T N P R R P Q P A G I H D L Y V A A L
UniRef90_M0QQJ9 K T A L S T A M A Q D A M Q T R L L Q N N P R D L N L N D A E Q I Y H A I Y A
UniRef90_R9B7Y6 D G Q I T A M A E S C S R A A G G K G S A K V L Y Q K D F E E I Y R M A
UniRef90_R6KBC9 E D M F D K V I A G A L V D H C H K T N P K E A S A A D Y R R M L E Q S M
UniRef90_Q0KBD6 Q S V L P R I C Q M A T F D S C L L S N P R T A G V E D M M Q I Y Q
UniRef90_C0QA69 D N E M K L L V N D A L S G N G I Q T N R R I P T A K N I E D I Y Q
UniRef90_UPI0002627465 A D L T P R I V T G A L A D H S H K T N P R E A S A D D Y A R L I E A A M
UniRef90_K0HTD3 E E K K E E L I R L S H H A N L K N N P V E V T D E Q I L R R L Y
UniRef90_E5VHX2 Q E A I P E M A R Q A I A S G T P D N N L R R A G E A Q I S D L Y
UniRef90_D0DBN6 A D A V D K L V A A L T S N G M L K G E H G D I T P E V S R Q I L Q R A L
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UniRef90_V9HH80 A A D I P A V A K S A I A E A R T Y A V P R Y M N Q R V A E S V I K N L L
UniRef90_A6GSB4 Q E M I G E I A K T V L A D S V T S N N P I A P T E G E V Q G I L
UniRef90_UPI0003659518 E S D I D K L V E L A F N T P S L D L A P V K A T K E I V K Q I Y M D S L
UniRef90_H2J4X3 D A D L E A L S L D A T M Q G T V K L S R R P L D A N D V K K I Y E A A
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UniRef90_K6BTJ9

UniRef90_HOUNE7 P D D L D F L V Q A G S Q Q R L L V N N C K E L S L D D I R Y I Y K K V M
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UniRef90_UPI000375A745 E E E F E D M S R K T Y E D P L V S F N P V I E P S V E I K N L Y L R A L
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UniRef90_R6WLE5 E N N I K E I I E N L S F Q N D I S K E D L R K I L N F A L
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UniRef90_Q0TSQ6 E Q E L Y E L T Y K C F E H T R T I G K F K E L D E T D M L E I Y R M A
UniRef90_B7C911 D E N F E A M A K S A V K E G S L D T A Y I K L T V E D A V E I Y R A S L
UniRef90_UPI000249095C Q D A L P A L A R D A M Q R L L V N N P R P V S E A D A L A I Y Q Q
UniRef90_K4KMI3 E A D L P K T I D N V L G N A V H F G V A E T Y P R D V V A T I L K S A L
UniRef90_G8QJ68 E A D L D R L V A A S F A P N M Q N S P V N I T K D K L K V M Y
UniRef90_G2TR89 E E D I P K L A R Y A D K E A N L Y P V P V L M D A G E L E Q F Y Y A
UniRef90_R9JWZ6 K D K I K E M A E N T P A Y K T S Y S D L S T S D I E T I Y N N A
UniRef90_D6S7J9

UniRef90_X1PDF2 A D D I P T L V E G A L K Q Q R L L A A P K V P T A D D L A S I L R D S L
UniRef90_H0E0U1 C E K F R E M A L S A T K N D S T I G H Y K P L S K E I I E I L K I A
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UniRef90_B0G3H4 R E D I P A L S K H A A A E G N L Y P V P V L M D A K E L A G M Y E K I M
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UniRef90_S6ETD7 S E A I P S L T S D A L Q T R L L D R S P M Q L E E A D I S K I Y V A A
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UniRef90_R5SJW4 E G E I P N L V N L A F T T P S L D G A P T K A T K E T V E E I Y R N S L
UniRef90_I3IFR1 R D S I P K L V D M L I K H E L L A G E H G A I T P E A S R E L E L A
UniRef90_Q7WMB2 R E L F A R I V D G A L K D H S H K T N P R D A S A E D Y A R M L D A A F
UniRef90_C6CM46 A A D L P A I V D N V Q G N V R L F G I A D T Y P P E V V T A T L K N A L
UniRef90_R6HDE3 D E Q I K E L A Y K C F N N T R T I G G F K A L N I D M E K I Y Q M A
UniRef90_E8LDZ7 E D E I K E L A Y K C F M N T R T I G Q F K V L T I G D M E N I Y R A A
UniRef90_B1KRI0 L A D V V L V G K M A K D A A G G N P I T L T D A E Y S L L F S D A
UniRef90_S9UA01 Q D A F D E M A R N A M A D R C T P T S P R Q P T L E E L E H I Y R K S F
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UniRef90_X8J8E3 D V D L E A I A K S T I R T D G C V K K F T D E E L L A V L K E C I
UniRef90_R1GNJ5 D T M F E E V A E R S A L R S S S I K G N P L P L S E S R L I H I L Q Q
UniRef90_I4DZF2 K A D I P E M A E R A L A D A C T P A N P R K V T K S D L E S I Y
UniRef90_F2JLZ2 L E D I Q E I A K G A L E D A C I I T N P R T A T A G D I L E I I Y K A
UniRef90_J2V7Y3 L A D L Q R L A E G A M Q T R L L V N N P R E V D V D A L G L Y T A A
UniRef90_J9S1E4 D K Q I R A I A E H M M D W C T P G N P R E S T V E S L I P M V A H A F
UniRef90_UPI00020D9BC0 N E H F E A M A T S A V S V G H L D H G F V P M A V A D V V A L Y E A S I
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UniRef90_UPI000329AC32 E D S L P R L A A D A M Q T R L L M N N P I D V D E Q A A L R E I Y Q A A F
UniRef90_B0C5C9 E A H F D A I T S K A L E A K S F Y A V P R L M N R A Q C K E I L
UniRef90_Q7WU59 E K D I P K L V R L A F E T P L L N L A P M K V D E N L V E A I Y K E S L
UniRef90_R5EHF8 P R S V E Q I V K A A L E D P C C K T N P M E V E D F L V R R I L E E V T G
UniRef90_C2EU78

UniRef90_UPI00030AAB5E E N D I S H L A K L A L K E A H H Y P V P V Y M G K K Q C E Q L L R S M M

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UniRef90_R6LPC9	D	L	N	R	P	A	F	A	I	L	D	S	P	K	L	A	M	T	L	P	P	R	Q	V	S	C	G	V	T	D	I	L	M	H	A	I	L	D	R	Y	F	T		
UniRef90_R5R3P7	K	N	L	S	Y	P	K	L	A	I	L	V	D	S	P	V	F	L	T	V	L	P	P	H	L	T	M	E	S	T	G	M	D	V	L	A	H	A	I	E	S	Y	V	T
UniRef90_MODW56	I	S	S	R	P	N	V	A	I	L	V	D	S	P	I	F	E	A	V	G	M	P	P	K	L	T	V	D	T	A	F	D	A	L	A	H	S	A	I	E	A	Y	V	T
UniRef90_X1DGU0	K	S	I	M	P	S	F	A	I	L	V	D	S	P	I	F	E	A	V	G	M	P	P	K	L	T	V	D	T	A	F	D	A	L	A	H	S	A	I	E	A	I	T	S
UniRef90_E6ME79	V	I	T	T	P	A	L	S	I	L	V	D	S	P	E	L	T	T	G	L	P	P	K	V	T	A	A	C	G	A	F	D	V	L	A	H	A	I	E	A	I	T	S	
UniRef90_G7LXS9	N	D	L	F	P	V	Y	A	I	L	V	D	S	P	E	L	M	L	T	V	L	P	P	K	F	T	A	Y	Q	G	F	D	A	L	F	H	S	A	I	E	A	Y	I	C
UniRef90_G0GZR8	F	G	N	E	D	T	F	A	V	V	D	S	P	E	L	M	K	S	V	V	P	P	K	Y	T	A	Y	Q	G	F	D	A	L	F	H	S	A	I	E	A	Y	I	S	
UniRef90_UPI0003B67C43	L	M	D	F	P	D	A	A	V	L	D	S	P	E	N	T	R	T	V	L	P	P	A	I	T	A	G	T	G	A	D	V	I	V	H	A	I	E	A	Y	I	G		
UniRef90_A8MEL6	L	I	T	E	P	N	E	A	I	L	D	S	P	A	G	L	I	A	G	L	P	P	K	Q	T	A	D	T	G	M	D	V	L	T	H	A	I	E	A	Y	I	S		
UniRef90_UPI0003B4C3D5	N	A	I	L	P	S	F	A	I	M	N	P	E	R	N	T	F	G	L	P	P	R	F	Q	T	A	A	E	G	V	A	D	I	L	S	H	A	I	E	R	Y	F	S	
UniRef90_D3F9T4	V	Y	D	D	P	A	I	A	L	V	D	S	P	E	R	N	T	F	G	L	P	P	R	Q	L	T	A	E	V	G	I	D	A	L	S	H	A	I	E	A	M	T	S	
UniRef90_V5HW65	P	K	I	L	P	G	T	V	I	Y	D	V	D	L	T	M	T	L	P	P	A	S	M	S	A	T	S	G	V	D	N	A	I	A	H	A	V	E	A	L	Y	A		
UniRef90_G2P4S2	L	G	H	P	P	R	I	A	L	L	D	S	P	E	L	T	T	G	L	P	P	A	P	A	T	A	A	T	G	I	D	A	L	V	H	G	I	E	A	S	L	A	S	
UniRef90_U2Q0I3	S	C	N	R	M	D	F	A	V	E	N	P	E	L	T	T	Y	T	V	S	P	P	Y	Q	T	A	C	G	I	V	D	I	A	M	H	T	I	E	R	Y	F	C		
UniRef90_F7XCG6	I	S	S	P	H	L	I	S	I	C	D	P	E	L	T	L	S	C	P	S	G	L	T	A	I	A	G	A	D	A	L	T	H	A	I	E	A	F	T	A				
UniRef90_H0UN13	I	A	Y	D	C	I	L	A	I	D	D	P	E	L	T	M	T	G	L	P	P	E	D	Q	T	R	Y	V	S	V	D	A	L	N	H	V	I	E	A	C	T	T		
UniRef90_UPI00037D5AB7	I	N	T	P	F	N	R	A	E	M	N	P	E	L	T	T	Y	T	V	S	P	P	K	K	Q	L	T	A	G	I	S	D	I	L	M	H	T	I	E	R	Y	F	T	
UniRef90_H1X5S7	T	Y	G	P	N	T	P	A	V	S	D	P	Q	L	T	Y	S</																											

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UniRef90_R6LPC9	W	A	R	Y	V	W	E	T	K	P	A	R	F	A	R	F	A	M	L	G	I	E	A	T	E	N	F	F	R	S	L	H	M	P	V	S	L	G	E	S				
UniRef90_R5R3P7	W	I	Y	Y	V	L	E	Q	L	F	T	G	R	E	P	T	N	A	E	O	A	S	G	E	L	M	K	R	F	L	K	Q	L	Q	L	P	R	E	L	G	V	K		
UniRef90_M0DW56	V	I	R	H	N	A	A	S	A	F	D	K	R	E	V	A	E	L	A	E	Q	A	S	G	E	D	T	M	R	F	L	K	Q	L	V	Q	L	D	S	E	L	G	I	E
UniRef90_X1DGU0	V	L	Q	Y	N	P	D	E	A	D	K	N	W	D	E	D	N	K	K	A	A	D	N	V	I	K	K	V	K	L	Q	L	V	Q	S	L	K	E	L	G	A	T		
UniRef90_E6ME79	T	L	E	Y	V	T	E	T	C	P	D	Q	R	I	A	I	A	K	L	L	G	E	K	I	R	K	M	Y	R	S	V	D	I	T	A	Y	I	T	D	E	R			
UniRef90_G7LXS9	Y	F	T	H	F	I	D	K	C	D	D	R	F	I	Q	M	A	K	T	M	G	M	I	V	K	L	Q	E	E	K	C	G	V	M	S	D	Y	G	I	T	R			
UniRef90_G0GZR8	Y	F	T	H	F	I	E	K	C	D	D	R	F	V	K	M	A	K	V	M	G	K	M	L	V	K	L	Q	E	K	C	G	V	M	S	D	Y	G	I	T				
UniRef90_UPI0003B67C43	V	L	R	S	Y	G	K	K	I	D	N	P	Q	L	H	A	L	A	I	A	G	D	A	L	D	K	L	W	K	D	I	L	G	I	P	S	K	V	L	K	L	T		
UniRef90_A8MEL6	V	I	R	H	N	A	E	G	N	Y	G	K	N	R	T	L	A	A	G	R	A	E	I	A	K	F	L	K	K	S	L	M	P	K	S	E	L	G	I	T	N			
UniRef90_UPI00003B4C3D5	W	M	K	Y	M	A	G	V	K	P	W	K	J	A	Q	F	A	V	Y	A	A	E	S	V	K	A	F	Y	K	L	I	G	L	I	K	T	R	A	O	G	I	N		
UniRef90_D3F9T4	V	V	R	F	G	L	G	A	T	P	E	R	Y	A	I	A	R	A	L	V	D	W	I	E	R	L	V	A	E	I	G	L	N	V	L	K	D	Y	G	M	K			
UniRef90_V5HW65	A	I	S	Y	N	A	P	K	I	P	D	A	M	K	L	A	E	A	L	P	E	S	N	G	D	A	I	H	G	L	N	V	L	K	D	Y	G	M	K					
UniRef90_G2P4S2	V	M	E	F	N	A	P	A	A	Q	G	A	Y	E	Q	V	A	R	A	M	G	D	W	A	R	A	E	I	A	V	R	E	L	R	T	L	G	A	D					
UniRef90_U2Q0I3	W	A	R	Y	V	Y	K	A	N	I	N	R	W	L	Q	Y	A	Q	N	V	W	N	M	Q	E	A	F	I	A	S	I	G	M	P	T	N	L	G	V	K				
UniRef90_F7XCG6	V	M	T	W	N	A	P	L	I	R	D	E	L	A	Q	I	A	H	A	A	G	P	A	L	V	S	L	F	E	R	I	G	I	P	R	D	L	G	L	E				
UniRef90_H0UN13	V	V	K	N	I	Y	P	A	R	P	E	V	T	P	E	E	A	L	G	A	E	A	L	E	E	W	F	L	F	S	V	G	V	F	T	Q	K	L	G	I	N			
UniRef90_UPI00037D5AB7	W	A	Q	Y	V	Y	P	D	D	L	P	R	F	A	R	F	A	E	K	V	W	D	W	H	E	A	F	F	K	E	I	C	C	T	F	T	K	L	G	I	N			
UniRef90_H1X5S7	W	M	K	R	A	L	S	A	A	D	A	D	D	Q	V	V	A	E	K	A	I	Q	A	T	Y	D	W	V	K	S	L	E	V	P	T	T	L							

UniRef90_R6LPC9	E	E	G	L	Q	E	L	L	A	L	R	C	Y	Q	K	T	R	T	I	G	S	F	R	V	L	E	T	Y	D	E	M	L	E	I	Y	R	L	A		
UniRef90_R5R3P7	E	N	D	M	V	S	I	L	A	E	D	V		Q	S	G	N	L	A	N	D	P	L	A	R	E	T	E	N	I	I	Y	K	I	Y	E	R	A	M	
UniRef90_M0DW56	K	E	D	I	V	H	I	A	E	R	A	S	T	E	R	S	N	L	A	G	N	P	R	R	E	V	T	K	T	E	D	I	E	E	I	R	R	S	I	
UniRef90_X1DGU0	K	E	D	I	D	V	L	V	N	L	C	F	E	D	S	T	S	V	L	G	P	R	S	A	N	T	E	E	F	G	K	L	Y	K	Y	A	F			
UniRef90_E6ME79	N	E	A	I	Q	R	L	M	P	V	A	Q	K	D	I	M	A	L	F	S	P	K	P	L	D	D	A	C	A	C	E	W	I	K	R	T	F			
UniRef90_G7LXS9	P	E	E	F	E	T	M	A	K	N	A	K	D	T	M	G	I	L	F	M	R	S	E	L	S	I	E	D	C	V	S	K	I	Y	Q	E	S			
UniRef90_G0GZR8	P	E	E	F	E	K	M	A	K	N	A	M	D	T	M	G	M	L	F	T	C	A	Q	L	S	I	E	D	C	V	S	K	I	Y	S	A	S			
UniRef90_UPI0003B67C43	E	V	D	I	E	A	L	A	R	Q	A	D	K	E	G	N	V	Y	P	V	P	R	L	M	N	A	K	E	L	E	K	F	Y	R	A	V	L			
UniRef90_A8MEL6	K	E	Q	F	E	R	V	A	E	A	A	L	A	D	R	C	Y	T	E	T	N	P	V	T	L	T	K	E	D	V	I	H	I	L	R	K	S	F		
UniRef90_UPI0003B4C3D5	E	E	H	F	D	E	M	A	A	Q	A	T	K	N	G	T	S	P	G	H	Y	V	P	L	D	E	K	R	F	K	E	I	L	K	L	A	L			
UniRef90_D3F9T4	P	E	A	F	E	P	M	A	D	A	A	V	A	S	N	G	P	E	F	N	C	Y	R	E	A	S	R	E	A	S	R	Q	I	V	A	I	Y	R	E	A
UniRef90_V5HW65	E	E	D	I	D	K	A	A	D	I	A	V	S	N	P	Y	W		N	P	R	E	I	E	R	A	P	I	R	E	L	I	R	R	V	W	A			
UniRef90_G2P4S2	R	D	M	L	P	A	I	A	A	G	A	V	A	D	A	V	T	T	N		P	L	S	P	D	H	T	Q	V	L	D	I	L							
UniRef90_U2Q0I3	E	T	D	L	E	M	L	A	F	K	C	S	R	G	K	R	T	L	I	G	Y	K	E	L	A	Y	D	I	L	L	E	V	E	R	M	A				
UniRef90_F7XCG6	E	D	R	I	D	W	V	A	E	Q	S	S	G	A	R	L	I	Q	N	N	P	R	P	L	A	N	P	H	E	M	R	N	L	V	A	A	A			
UniRef90_H0UN13	E	E	H	V	S	K	L	V	H	L	A	K	T	T	P	S	L	D	T	A	F	V	T	A	T	Q	D	V	I	E	D	I	Y	R	C	S	L			
UniRef90_UPI00037D5AB7	E	A	T	I	H	E	L	A	D	A	V	T	A	G	T	T	V	G	N	F	H	P	I	G	R	K	E	A	I	D	I	Y	T	L	A					
UniRef90_H1X5S7	I	N	D	F	R	A	M	A	E	S	A	V	E	I	G	G	L	D	G	G	Y	V	N	L	T	V	D	D	V	V	A	L	Y	O	A	S	M			
UniRef90_D4LRH5	M	N	D	L	D	F	L	V	T	A	G	S	Q	Q	R	L	L	N	N	M	K	E	L	S	D	L	D	V	I	R	N	I	L	E	L	K				
UniRef90_B1IKP6	E	N	D	V	E	K	L	T	K	L	A	F	E	T	P	S	L	D	L	A	P	I	D																	

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UniRef90_K6ZXFO		Q	V	M	F
UniRef90_U0EVS3	M	F	Q	F	M
UniRef90_E6WNE6	F	T	W	F	N
UniRef90_UPI0003B35DDE	V	R	E	I	R
UniRef90_R7JFI8	F	T	E	Q	N
UniRef90_K1MUL1	F	E	L	K	N
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UniRef90_K9I8A4	M	E	R	I	A
UniRef90_W6LTT8		P	R	I	E
UniRef90_G7HWZ1	F	T	Y	Q	L
UniRef90_I8S9I5	F	T	Y	Y	M
UniRef90_UPI0001C37C22	K	F	F	M	P
UniRef90_F6F2K6		L	P	S	R
UniRef90_T8RDB8		Y	F	S	C
UniRef90_L1M6L0	M	I	H	Y	W
UniRef90_E0SR77		Y	A	S	T
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UniRef90_A5N658		T	S	I	I
UniRef90_A5F281	M	F	Q	F	M
UniRef90_A4CXS8		F	P	Q	P
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UniRef90_T0M1G5	M	W	Y	F	R
UniRef90_J3DSI7		R	F	Q	N
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UniRef90_A0A017CFK8		T	F	F	I
UniRef90_N2QH48		I	V	T	G
UniRef90_B0TIC8	M	F	S	F	I
UniRef90_M9RIX5		P	Q	T	H
UniRef90_UPI00035F48E7		P	R	I	V
UniRef90_C6B8W8	I	F	T	Y	S
UniRef90_D6N162		F	E	F	A
UniRef90_M4WZT8		R	F	N	H
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UniRef90_G2Y6D8		S	S	I	R
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UniRef90_B7VRE7		F	T	Y	V
UniRef90_J3JCK0	M	E	K	I	S
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UniRef90_Q87HX7		F	S	Y	V
UniRef90_J4WBD8		F	M	Y	H
UniRef90_E8M5N2		F	T	Y	V
UniRef90_E6V463			P	Q	R
UniRef90_E0SFF0		S	M	N	I
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UniRef90_K1WCU3		S	S	I	R
UniRef90_F0Q575		F	S	Y	A
UniRef90_I3RYG2		P	V	R	V
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UniRef90_U7VC21	M	R	E	Y	F
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UniRef90_X0WCB2			I	L	F
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UniRef90_B7GJB4		F	E	F	I
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UniRef90_G7DQG5		F	T	F	N
UniRef90_F1YGW3		F	T	Y	S
UniRef90_UPI000468FB34		F	V	F	Q
UniRef90_K2K4N5		F	V	I	R
UniRef90_D1MYS4		R	V	L	F
UniRef90_A0A023GNG8		S	N	I	R
UniRef90_L9VML7	V	W	H	L	Q
UniRef90_H2PQG5		S	N	I	R
UniRef90_W3Y2G3		F	D	F	Y
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UniRef90_C2D0M9			Q	T	I

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UniRef90_U2ZHX1	I A K E Q A I D F L I	A V G G G S V I D G S K Y V A A A A K Y D G D G W D I M T		
UniRef90_QOBAD3	L A R E L H A D C A I	A V G G G S T I L G L G K A I A L E S D L		
UniRef90_K6ZXFO	A I R S V N A D L V V	T V G G G S V T D A G K I A A L L V K H N V T D S S Q M E		
UniRef90_U0EVS3	V G R K F K P D M V V	A M G G G S V L D M G K A L A A L I P N Q G D V Y D Y V R		
UniRef90_E6WNE6	L A R Q N N V D A V L S I	I G G G S V L D S V K A I A A G V P Y Q G D V W D L F I		
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UniRef90_W6LTT8	Q F Q G K D I T A V V	G I G G G S V L D A A K A I A G L L H I G D S V M D Y L E		
UniRef90_G7HWZ1	E V K R L G A D G C V	S I G G G S A I G L G K A I A		
UniRef90_I8S9I5	K F A G W Q P E V V V	A L G G G S A I D A G K G I L L G L S T G E K V E P Y L L		
UniRef90_UPI0001C37C22	M G I E C G A D F V I	G I G G G S P L D A A K A V A L M I R N N E K S W E F L Y		
UniRef90_F6F2K6	M V A S G E V D G T I	A V G G G S T T G L G K A I A F R T N		
UniRef90_T8RDB8	R F K A F K P D V I I	A L G G G S S I D A A K G I K V T L E E Y F G D		
UniRef90_L1M6L0	A F A E G G H D S L I	A L G G G S A I D A A K G I A L L S R D P Q G A A R F E W		
UniRef90_E0SR77	I V W S E G V D L I I	A I G G G S P I D V A K V A S V I A L S G G R V K D Y V T		
UniRef90_UPI0003F9CD73	L A R E K K V D F L I	A V G G G S V I D C K I I S A Q A R T K K D I W E M E F		
UniRef90_A5N658	R V K E F K P D L I I	S I G G G S S I D A A K I I T L F Y E Y E D I N F S N V L		
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UniRef90_A4CXS8	A Y R E G H C D S L V	A V G G G S V I D C A K A I G A R A A N P W L S C R A M E		
UniRef90_UPI000469AE8F	Q F N Q F Q P T V I V	A V G G G S A I D T A K A I R F F G E		
UniRef90_T0M1G5	D I N N F S P E Y F I	S I G G G S V I D S S K I L F E K Y E R P D L E F Y D V T		
UniRef90_J3DSI7	W Q H A G D C D V L V	A V G G G S A I D T A K A I L V G T E S G R F D E L L S G		
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UniRef90_C6B8W8	V V E Q T Q A D C V V	S L G G G S T T G L G K A I A Y R T D L H Q		
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UniRef90_R9VQT4	V V K D E N I T F L I	A V G G G S V L D G T K F I A A A A H Y A D P W H I L Q T		
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UniRef90_Q0KAS5	H A A R L G A D C A V A I	I G G G S T I G L A K A I A L E S E		
UniRef90_B7VRE7	L V K E E N V E F I I	A V G G G S V I D G S K Y V A A A A K Y D G D G W D I L A		
UniRef90_J3JCK0	V F N Q V K P Q V M I	V G G G S A I D T A K A I R F F G E		
UniRef90_U2CD33	R L L E F R P D C I V	G F G G G S A L D A A K G I R Y F A A G Q G G G R C R F I		
UniRef90_Q87HX7	I V K D Q N I D F I L	A V G G G S V I D G S K Y V A A A S K Y D G D G W D I M I		
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UniRef90_E8M5N2	I V K E Q N I D F L I	A V G G G S V I D G S K Y V A A S A K Y D G D G W D I L T		
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UniRef90_B8F9S6	R L T G A S F D A V V	G F G G G S A I D S A K A S A K K S D H T L T H V I D N P		
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UniRef90_U2TQA0	Q Y V H H T C Q A L L	A I G G G S V I D C A K I A G A L V V N P G K S V A D I S		
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UniRef90_W6WNV2	L A R R L D A D C A I	A I G G G S T T G L G K A I A L E S D F		
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UniRef90_U2ZHx1	F	M	S	P	P	K	F	A	V	M	D	D	P	D	V	M	K	T	L	P	E	R	Q	L	I	A	W	S	G	F	V	E	A	L	G	H	A	V	S	Y	L	T
UniRef90_Q0BAD3	L	R	V	L	P	K	T	V	I	Y	D	A	D	L	T	M	S	L	P	V	A	L	S	V	T	S	G	I	V	N	A	I	H	A	A	E	A	L	T	L	S	
UniRef90_K6ZXF0	Y	S	H	R	E	M	A	I	L	D	P	A	I	T	T	V	H	T	P	E	W	L	L	W	I	S	T	G	V	R	S	I	D	H	C	V	E	T	L	A	S	
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UniRef90_K1MUL1	P	G	L	F	P	Q	F	S	I	L	D	P	N	V	T	Q	S	I	L	P	K	H	Q	L	A	N	G	I	A	D	A	Y	T	H	V	L	E	Q	Y	M	T	
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UniRef90_W6LTT8	D	L	L	V	P	E	K	A	L	L	D	P	A	L	T	L	A	N	C	Y	Q	P	Q	I	A	A	N	A	M	D	A	L	T	Q	L	L	E	A	S	Y	V	S
UniRef90_G7HWZ1	E	S	V	L	P	K	S	V	I	Y	D	P	A	L	T	S	G	L	P	V	A	T	S	V	T	S	G	F	N	A	M	A	H	A	V	E	A	L	Y	A		
UniRef90_I8S9I5	F	R	H	K	G	F	F	A	L	V	D	P	Q	L	T	M	S	L	S	P	E	T	T	V	E	T	G	F	D	V	F	A	H	G	V	E	T	Y	I	S		
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UniRef90_F6F2K6	M	A	L	L	P	E	V	V	I	Y	D	V	G	K	F	T	L	S	L	P	A	S	L	S	A	T	S	G	M	N	A	M	A	H	A	V	E	A	L	Y	A	
UniRef90_T8RDB8	L	I	S	V	P	E	I	A	I	L	D	P	N	L	V	L	T	A	P	R	H	V	A	V	D	T	G	M	D	V	L	T	H	A	L	E	A	F	V	S		
Uni																																										

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		330		340		350																																	
UniRef90_A1RUX3	E	R	D	V	A	N	I	A	E	R	V	F	T	T	F	R	E	W	I	N	P	L	E	V	T	K	D	V	I	I	D	I	L	K	S	A	L		
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UniRef90_U2ZHX1	G	D	D	I	E	A	V	I	S	Q	L	E	A	N	H	G	M	T	Q	G	E	H	Q	A	I	T	L	P	V	S	R	K	I	L	E	E	A	I	A
UniRef90_Q0BAD3	A	G	D	V	S	K	A	A	D	I	A	S	A	N	P	Y	W				N	P	R	P	I	E	R	E	A	L	L	A	L	L	Q	D	A	F	
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UniRef90_R7JF18	Q	D	T	I	D	E	I	V	R	R	F	N	E	R	G	S	R	L	G	E	A	G	N	I	T	G	D	V	T	R	R	I	L	E	L	C			
UniRef90_K1MUL1	T	D	D	Y	O	N	I	G	K	E	T	A	E	N	W	L	G	L	G	E	H	K	K	I	T	P	E	D	V	Q	K	V	L	E	M	T	F		
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UniRef90_K9I8A4	T	E	A	T	D	Q	I	V	A	S	A	K	L	D	G	T	F	P	G	N	P	V	V	P	T	D	E	D	L	A	E	I	Y	K	K	I			
UniRef90_W6LTT8	E	S	D	F	A	Q	V	V	A	H	S		R	G	S	S	M	K	T	N	P	L	V	L	R	D	A	E	I	A	A	V	L	K	Q	R	L		
UniRef90_G7HWZ1	R	G	D	I	P	S	I	A	K	Q	V	H	S	G		T	Y	G	N	P	R	E	A	S	E	D	I	T	R	I	L	N	A	A	W	A			
UniRef90_I8S9I5	K	A	D	V	S	Y	L	A	S	K	V	T		G	N	L	S	N	D	P	A	G	E	I	P	G	I	E	K	L	Y	D	G	A	F				
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UniRef90_C6B8W8	V	A	D	L	D	R	A	A	E	I	A	T	E	N	P	Y	W			N	P	R	P	I	D	R	K	S	I	R	A	L	L	Q	D	A			
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UniRef90_U2CD33	R	K	C	F	E	A	A	L	K	E	M	A	Q	D	P	S	T	G	T	N	P	E	R	C	T	Q	E	E	V	I	E	L	F	R	K	A			
UniRef90_Q87HX7	E	Q	A	I	D	A	I	I	D	Q	L	N	K	H	G	M	T	L	G	E	N	Q	A	I	T	L	I	E	S	R	E	I	L	E	L	A			
UniRef90_J4WBD8	E	E	A	V	E	L	D	T	N	Q	L	E	K	H	G	F	T	K	G	E	K	G	E	V	N	L	E	K	I	R	L	I	Y	K	G	A	L	A	
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UniRef90_E6V463	E	S	D	L	D	V	A	C	A	H	A	L	Q	N	Q	Y	P			N	P	R	P	L	E	R	D	A	I	R	A	L	L	Q	N	A			
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UniRef90_K1WCU3	R	E	H	L	D	D	L	V	E	G	T	L	Q	A	R	V	L	M	L	A	P	L	A	E	R	E	Q	L	R	E	L	F	E	D	A	M			
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UniRef90_B2TPN1	V	N	T	P	I	V	I	Q	G	M	F	A	L	K	E	N	S	M	D	Y	F	V	Y	D	K	I	V	S	N	P	T	D	I	L	D	G	A	K			
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UniRef90_G4L2U8	A	K	F	H	S	E	H	T	K	L	F	A	I	P	T	T	S	G	T	G	S	E	V	T	P	F	A	V	I	T	R	D	H	T	H	V	K	Y	P		
UniRef90_UPI00036CF5BA	Q	G	E	A	V	Q	E	V	V	P	L	G	T	V	V	L	T	L	P	A	T	G	S	E	M	N	S	L	S	V	I	S	R	Q	S	T	G	D	K	G	N
UniRef90_R5QC63	G	R	A	Q	V	E	R	A	L	P	V	F	A	V	L	T	L	P	A	A	G	S	E	Q	S	V	R	A	V	I	T	H	H	G	T	K	T	G	I	G	
UniRef90_A9A086	W	D	L	I	K	I	P	A	V	Y	H	V	G	I	P	T	L	S	G	T	G	A	E	V	S	R	T	T	V	I	T	G	P	T	K	L	G	I	N		
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UniRef90_B0EPR8	M	E	K	A	S	A	P	K	S	K	I	G	A	V	L	T	L	P	A	T	G	T	E	T	N	N	L	F	V	V	T	N	Y	G	K	K	D	K	N		
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UniRef90_M1NQ22																																									
UniRef90_N9URR4	P	N	P	I	T	T	G	P	D	I	P	V	I	C	V	P	T	T	L	S	G	G	E	F	N	A	L	S	G	A	T	D	E	V	T	G	H	K	Q	G	
UniRef90_UPI0002197A66	Y	K	F	P	K	P	E	K	A	Q	F	V	A	I	P	T	T	F	G	G	D	Q	V	T	P	F	S	S	I	D	T	K	T	G	T	K	Y	P			
UniRef90_R5FUC3	T	Y	Y	R	G	E	C	L	P	L	G	T	V	L	T	V	P	A	T	G	S	E	M	N	P	G	A	V	I	S	N	R	A	T	Q	E	K	F	S		
UniRef90_S0ASZ2	M	Q	K	V	T	K	P	K	A	K	I	G	V	L	T	L	P	A	T	G	T	E	T	N	N	L	F	V	V	T	H	F	E	K	K	A	C				
UniRef90_K2BDU3	F																																								

	170	180	190	200
UniRef90_M2W6W1	R A L A P R A V I L D P E I A A V T P P W L W A A S G V R A L D H A V E S I L A			
UniRef90_R5WXT7	F G H P P K M S V I L D P E F T A S Q P S R E Y T A A G S C A D R V M F H I M E G N Y F			
UniRef90_UPI00040464DF	F F H P P Q M S V I L D P D E L T S L H T P S R E Y T W M F A G C A D R S M D H G I E A N L C S			
UniRef90_Q9W265	K F L L K P T L A V I L D P D L H T L S Q P Q R V M A F A G F D V F C H A I E S F T A			
UniRef90_B2TPN1	V L S N E Y A V I L A P P E L A L T L P K R S M T A A T G I V D A F S H A A E G Y T S			
UniRef90_Z5XKQ2	F A S E Y R F A V L D P A V T F S L P K E R Q V T A T G I V D A F V H T M E Q Y L T S			
UniRef90_G4L2U8	L A D Y P Q V A I V D P A F V M T V L P K R T V A L S G L D S L S H A L E S Y V S			
UniRef90_UPI00036CF5BA	P K V F P R F S I L D P T R T Y S L P M R Q V V N G V A D S F V H V M E Q Y M T			
UniRef90_R5Q6C3	S E H I R P K A A F I N P E R F S T L P A I H I S A G V M L S H I C E R Y F S N			
UniRef90_A9A086	S D H T F D Q V V L D P E L T A G V P K D Q W F Y T G M D C Y I H C V E S L Q G			
UniRef90_A6FFH6	S P L R P A F A I L D P A V S L S L S D R Q I S N G V V D A F V H T T M E Q Y M T			
UniRef90_B0EPR8	D L V K P Y F A I L D P C H S F T L P K N Q I S N G V I D S Y V H V I E Q Y I G			
UniRef90_UPI00037C0A7D	P L M I P R T V V F I D P V L T R S H T P L G L W L S T G M R A V D H A V E S Y C A			
UniRef90_D9U260	L R L R P T L A V V D P R L T A S Q P A G V T A A S G M D I L C H A A E S Y T A			
UniRef90_M1NQ22	N R V L P A S V I Y D S E L T L S L P V E L S V A S G L N G L A H C V D S L W A S			
UniRef90_N9URR4	Y E H R N M A P I M D P A I T R H T P E W L W L S T G V R S V D H A V E S L S S			
UniRef90_UPI0002197A66	I A D Y P D V A I I D S Q F V E T M P K D I M A E S G M D V L T N A V E S Y V A			
UniRef90_R5FUC3	M V G E H P F S I L D P T Y T Y T L S Q H Q V A C G I A D A F M H T L E Q Y I T			
UniRef90_S0ASZ2	D Y V K P H F A C I D P V H S F T L P V N Q V R N G V I D A Y V H V I E Q Y I G			
UniRef90_K2BDU3	I N T T M Y I C I L D S L L T V S C P R H V T I S S G M D L V H A H E S F V S			
UniRef90_G4R9G6	D A I L P G L V L Y D P E L T Y S L P A S F T L T S A V N A M A H A A E A L Y A			
UniRef90_K6YT2B	Y M H R N M A I L D P A I T V H T P E W L W L S T G V R S V D H C H V E T L A S			
UniRef90_F2PUJ5	V A H R N M K P I C D P L N T R T M P P A V H A S S G L D V L C H S L E S W T A			
UniRef90_I3C0N2	D F T P F D Q V L L D P P E L T N G V P K D Q W F Y T G M D C Y I H C V E S L N G			
UniRef90_UPI0003B318F3	V S D R P R V A I I D P L N V I S A P P E V T A S A G Y D A L V Q A L E S F T S			
UniRef90_T0LJT6	N Y D L P V E I D I L D S S L T S L P D K K V I L P T G I D A F V H S F E A I A S			
UniRef90_W8JE04	P K V L P K T V I Y D P L L T V E L P L A I S V T S A L N A I A H A A E G L Y A			
UniRef90_H8GYL4	I S H R P A Q A L V D P E L S R A A P G A V I A S A G L D V V C H A A E S F L S			
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Uni				

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[illegible]

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UniRef90_I23JB0	I	V	S	N	Y	D	I	A	V	L	D	A	H	M	T	T	G	L	P	P	M	L	T	A	T	A	G	M	D	A	L	T	H	A	V	E	S	T	M	G	H		
UniRef90_W5YGB3	L	R	D	N	Q	D	L	A	L	V	D	P	A	L	T	D	N	C	P	R	H	V	S	L	H	S	G	L	D	A	I	T	Q	V	I	E	S	P	Y	L	S		
UniRef90_I5B2D5	D	Y	T	V	F	D	Q	V																																			

[illegible]

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320

V L A F N A P A A P E A E R R I A E A F G A R L R R A V D A P E A L R D H G F D

T I G F N V A V A G D L L A P L S A A L G G A L H R F A T Q L G A P T D L G L T
V M T V R K L K K W D K L V Q Y A E N V W G I T E G F F K S I D M P K E I G V T
V T J A Y N A K D P V A K K R Y G V I A L I D Y L R K M N D D L N I P H S I N V F
L E E Y Y P E G V K E F R T M M D K C G V D I P R G L T K D L S
V F K V Y Q K K N W K L S K L N C Q P E Y V Y P K L D E L L G C H E Y G M K
L L T V Q E D K W A K L L Q Y A E A I A L T R K F F E Q M R I K T H L G I G
V I R Y N A T D M P A K Q A A F P Q Y Q Y P T A K Q D Y A D L A N M L G L G G N
V M R F N E S V C R E K F A E A Y D R C S A Y I L R W L E E I V K H L D I G V K

V L K Y N K P A T A E A W H E P E A D A S E V F A R F I A R L G L P T R L G V T

V M K A Q E Y Q R Y G E M A E L A R H C G D K L I T A I R E L L D R C G L A L R
L L Q A K R Q Q K H A K L L Q Y A E R V W D A T R D F F E R M G V K T R L G V A
V M E E F P D F Y V P V A D R L K G V F G A A I R E L L V Q M G H P L D F A I P
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L D E Y Y P D G V R E F R A I M E K T G V D I P R G V T K D L T
L L D A Q R A T K A A K D D E R I D A T I A A T R D F F E R M G I P T R L G V G
L L R E Q A A K Q K E K L A Q F A E R V W I R T E Q F F Q Q M G V G T R L G L S
F M R F T Y P S T I Q K F A A L A R I F C S L I D D F L K K N G M Y E D L K V P
V F T F T A Q M S P E R H L E M A E I L G D T L R K F L F D L D V D D G L G Y S
V L R A N A R A V A T R H E V A S W I G A A L I D L L E A L P R L L A A M G V E
V M R Y N F D K N P M R S S P S A K D A T A E L L G E M D E L Y R Q L D I G Y G
L E K Y Y P E G V A V F K K M K E Y H N I N L P T G V C A N V T
V V A Y N A P A A E T A M A R I S R A L P G P V F R F A R G I G A P R D L G M P
L L V E K K T Q K R A K L L Q Y A D A I A A T R A F F E T M G V P T R L S L D
A L A Y N A G H A P Q A I E R L K R A L A V A L F D L A Q S L M S L K N L G M P
M M H E R V A K R E K L L Q Y A D A I E N T R A F F E T L G V K T R L N G L E
T L R T L R K Q K Y G K L L Q Y G E R V W E K T E E F F R S L G L S T H L N I G
S M A F N A Q A F P E A T R D S T A G I V A G L N Q L L R L N I P T D I G M Q
V I R F N A
W M T Y L K K E K F H L L L R Y A R A A I R K T K E F F A G V G L P S E L G I D
V V A Y N A P A A P D A L T A L G R A L D E A L W N L T S D L G A P R E L G L K
F M R R N Y E V L K D K I K K F G H
L Y R V M F D T K K D K L A Q Y A E K A I E K T V E F F H K M G M K T K L S E N
V L D A L A Q E R R A E L L E V A D L F G I V I R E L V E A L G I P A D F G I A
V F K F T A A S N P E R H L A A A E V F G V D I S N A R A E

A F R A L A A T D P A R H L E A A T L L G A D P A D L R A S A A D P R A I G L L
A M A F N A P A F Y P D V M S R I A T A L G A D L V T A C G G P T T L R E L G M S
V I E A L P E F Y M P N A G K L A Q A F Y Q R V L N F L R A M Q R F N D W S F D
V M E W N F S Y D K L I S D T H N L D M T H F L S D F S K V L K A F S D Y G Y V
F L H H T L Q K Y Q K K Y I D A A K C F I E M V D T F M Q E C E L N K H I S D Y
A L A Y N E I A A P E A M D K I A H A L G T D L A L S N G A P T A L R D I G M R
V I R F N A
V M R S V I G R D A N C D A V L K R I F G D N L E A F I T G L G V S T D Y G V A
V L R W N L P A A T P Q L A Q T A R S L G D E M I K A L E L P Q R L R D V D V P

I E K L Y R T K A P K G T I E T A D I L H S P V A D V Y D N L D P L K K Y G M T
N L E I R R E A K R A K G L L Q Y A D M A I Q O T R M F F E S L G L P T H L S A Y
W M E Y C L N E A S L E P M T V A R K S I E L L S E F F F K T S T F T E V G I Q
F V K A N S K
L G D I Y P K E Y K Q F R T M I E R Q G V N L P T G I C K D L T E E Q Y E G L Y
V F N F T S T A C P D R H I E A A D I L A D I V R N F M D T M K I E S A L G F D
V M R H S E K H A
V L K N Y M E I A V L N R Y L A D L L G D K L E E L L N Q I L P K K P L G M T
A L A Y N A P A V P Q A L A S L H R A L D K D A P R A L R D L S V H A E L G F K
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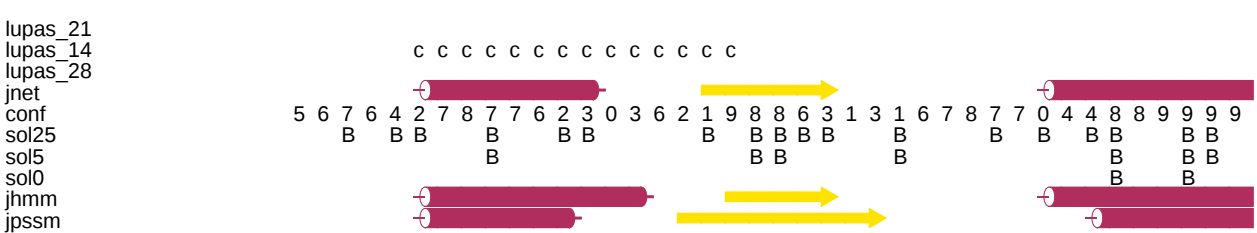
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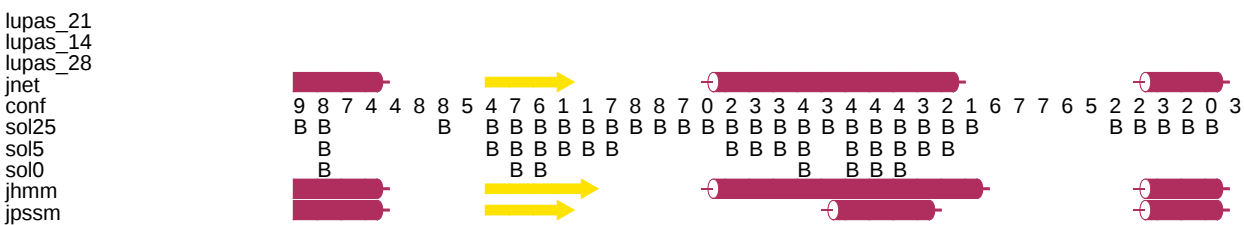
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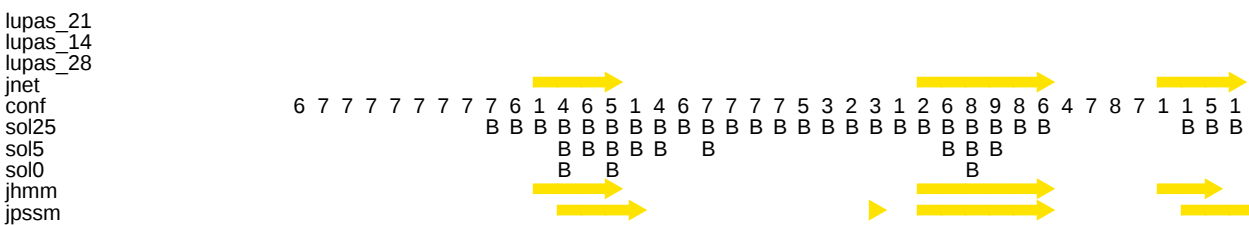
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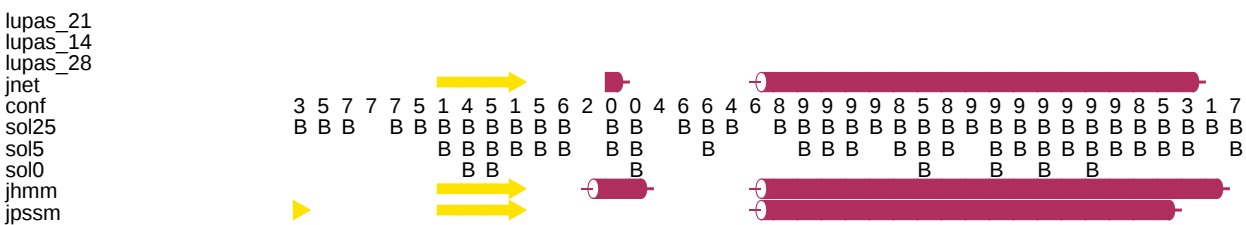
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UniRef90_UPI000378D22C	F	A	V	E	H	D	V	E	C	V	I	G	L	G	G	A	A	C	M	D	T	A	K	A	I	A	F	C	A	R	H	A	D	D	M	D	A	Y	L	T
UniRef90_R7AMY1	I	V	R	E	Y	K	P	D	L	I	L	A	V	G	G	G	S	V	I	D	A	T	K	F	I	A	A	A	A	C	L	D	E	F	V	W	D	I	I	S
UniRef90_A2EA55																																								



	130	140	150	160																																					
UniRef90_X1TQS7	G	L	P	L	D	V	A	P	L	P	F	I	A	I	P	T	T	A	G	T	G	A	E	V	T	R	N	A	V	I	G	V	P	E	H	R	R	K	V	S	
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UniRef90_J9NCV0	G	K	L	P	I	E	K	D	K	E	L	V	L	V	P	T	T	C	G	T	G	S	E	V	T	N	I	A	I	L	A	L	N	S	R	G	T	K	K	G	
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UniRef90_I1G8L8	V	G	K	V	K	Q	T	G	V	P	L	I	A	I	N	T	T	A	G	T	A	A	E	L	T	S	N	A	V	I	I	D	S	Q	R	Q	V	K	E	V	
UniRef90_Q1C0V6																																									
UniRef90_D3LUM8																																									
UniRef90_J1EKY6	G	R	P	D	R	I	G	P	G	P	L	L	V	V	P	T	T	I	G	T	G	S	E	S	S	P	A	T	G	L	H	P	D	A	G	T	R	A	I	G	
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UniRef90_E2RTV7	E	S	P	K	D																																				
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UniRef90_W7DTT6	S	N	D	A	P	T	S	A	L	S	V	I	Y	K	E	T	G	E	F	D	E	Y	L	M	F	P	T	N	P												
UniRef90_F0RSH5	K	R	K	I	T	E	R	S	R	T	L	V	L	I	P	T	T	A	G	T	G	S	E	V	T	K	V	G	V	Y	T	D	A	T	G	R	K	Y	T	L	
UniRef90_E7GE76																																									
UniRef90_UPI0003B45CAE	G	A	P	Y	R	G	P	A	T	P	F	I	A	V	P	T	T	A	G	T	G	S	E	A	T	K	N	A	V	L	A	D	G	F	K	K	S	F	R	D	
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UniRef90_D1B128	S	T	D	A	P	T	S	A	L	S	V	I	Y	T	E	E	G	A	F	E	E	Y	R	F	F	P															
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UniRef90_UPI00047CC7E5	V	P	P	V	K	E	K	L	I	L	I	P	T	T	C	G	T	S	E	V	T	N	I	S	I	L	A	L	L	S	R	G	T	K	K	G	L	A	H		
UniRef90_UPI000378D22C	V	N	L	I	K	K	P	G	I	Y	H	V	G	V	P	T	I	S	G	T	G	A	E	V	S	M	T	A	V	L	T	G	P	E	K	K	G	L	K	C	
UniRef90_R7AMY1	H	E	Q	R	N	D	E	K	L	P	L	A	L	I	P	T	Y	P	S	T	G	S	E	A	N	G	V	S	D	I	M	G	Y	A	G	G	I	K	G	V	
UniRef90_A2EA55	K	G	A	Y	A	K	T	A	V	P	F	G	T	V	L	T	I	P	A	T	G	S	E	W	N	N	G	Y	A	I	Q	R	D	D	I	Q	E	K	N	N	

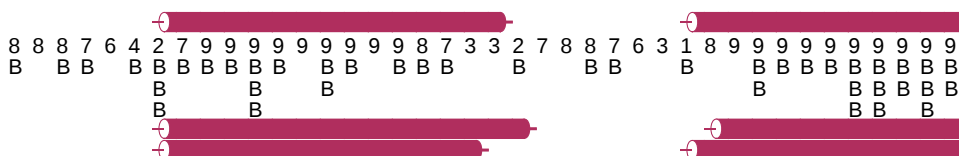


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UniRef90_K8Z7D2	K L D D A F Q A Y L I P E L A T S M P K A T T A N T G M D A L S H A L E A Y V A			
UniRef90_J9NCV0	P K I L P A V V I Y D V D F T L T L P I I I C T L E G I K S L A E A L			
UniRef90_R5KGF6	L A V D E M Y A V L I P E L L K G L P F R E F A T S S I D A L V H A V E S S L S			
UniRef90_I1G8L8	R A L R P T L G L I D P E H V T T M P K N V A V F S G F D V L C H A L E S Y T A			
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UniRef90_J1EKY6	T R S P F R A V I S D P Q L V R S L P R L V A A T G M D A L A H C L E G F L A			
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UniRef90_W7DTT6	D T T I I A K A P V R L F V A G M G D A L S T Y F E G R A C S L S R A Q T M A G			
UniRef90_F0RSH5	G S M M A H A A V L V S C L L D S V P S L C A A T G L D A L D H A L E S I W N			
UniRef90_E7GE76	L F L P T S P N I V D T E V V S K A P A R L L I A G I G D A M A T Y F E A R A C			
UniRef90_UPI0003B45CAE	D A L V A H T A I V D P D L L V G C P K P Q I A A N G M D A L T Q L L E S Y V S			
UniRef90_V4JL54	N E V C Y P K A F D D P R Y T I S M P K E Q V I C T T L D A L Y H A Y E S A T T			
UniRef90_D1BI28	H N P D L V L V D T Q L V A N A P V K F L V A G V G D A L A T W L E A R A T			
UniRef90_K4SCL2	L R D D R M L A I V D P A L T D N A P R S I T L S S G L D A L T Q V I E P W L C			
UniRef90_UPI00047CC7E5	E A L F A D Q A V L I P E L L E G L P F R F F A T S S I D A L V H A V E S S L S			
UniRef90_UPI000378D22C	E W T V F N Q V I L D P E L I A T V P R N W F Y T G M D T Y I H C I E S E N G			
UniRef90_R7AMY1	Y A D L A L L Y P P F T C S L D A K A T T Y G L M V M L A Q T G Y R F F			
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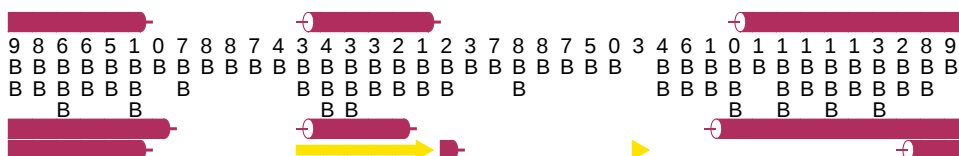
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UniRef90_UPI0003B3018D	T R A N P V T D A C A D A I P R G L A A L I R L M R A E D P D A R D E M A W T S			
UniRef90_K8Z7D2	Q A M D P I T D G M A E K A I Q L L F E Y L P Y H N P E D V D A R S H V M N A A			
UniRef90_J9NCV0		P Q I V E N P N S K A P R D Q A L Y G A		
UniRef90_R5KGF6	P K G N E Y T R M F G Y K A I D M I L L H G Y M E I R E K G P E A R I P L L D A S			
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UniRef90_J1EKY6	D P P H P L V D A I A L D G L A R A Y G H V Q A A L H P G A D A A R L E L M V A			
UniRef90_F4LNE8	Q K A T F F S D M L A E K A F E V Y A L D G G Q S L A V T T P P E V L L S M G G			
UniRef90_A0A014M9M6	P D T S P L V A V T A G E A I A V M I R A L R G L D G G W N E D R D D A L Y A S			
UniRef90_E2RTV7	V K T T E L S V K A S V E S L K H L Q I C W H F Y D P E M T E F R D E M T L A S			
UniRef90_UPI00047BE1DA	R R A S E K S V A P S L A A I R L V A A N L P T A E P G N I A A R T A M M E A A			
UniRef90_W7DTT6	G Q S T L A A M G L A R L C Y D T L L E E G Y K A K L A V E N G V A T I A V N R			
UniRef90_F0RSH5	K N S T A L T K I V A R N A A I E I L E T L P K N N P K K R S L T Q A M L K A S			
UniRef90_E7GE76	Y Q S E A D N C L G G K C T K A A M S L A R L C Y E K V C T K A V E N I E A N			
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UniRef90_V4JL54	V G S S P L V L T F S L E A V K R I R D N L P L A V E R P N D E R Y W L M Y A A			
UniRef90_D1BI28	R R A H A T T M A G G L Q T E T A V A L A K L S W D L I W E N A V E K L V E A N			
UniRef90_K4SCL2	S R A T P E T D A L C Q Q A I P R G I R A L K L L M E Q E C P A R D E M A W V S			
UniRef90_UPI00047CC7E5	P K A S D L S K L F G Y R A I D M I L R G F L T I R D Q G Q E A R I P L L S A A			
UniRef90_UPI000378D22C	N L N N A Y S H A Y A E Q S M K L C R E I Y L D R S G Q T P E N D D K L M V A S			
UniRef90_R7AMY1	A D R N P I S R G F T L S S L K A I I A A H E M E D A E D Q D A R G T M L W A			
UniRef90_A2EA55	S E S A P M S D N F Y Y S I M R E L V D I S D M K P N S S L E L H E R L I T A A			

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 lupas_28
 jnet
 conf
 sol25
 sol5
 sol0
 jhmm
 jpssm



	250	260	270	280
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UniRef90_K8Z7D2	S L G G L A F I K A G L G A I H G I S H S V G A R L H L A H G L V N T L L M N D			
UniRef90_J9NCV0	W L C G T A L G N S S M G L H H K I C H V L G G S C G L P H A E T H T V M L P H			
UniRef90_R5KGF6	N Y A G I A F G N A G C A A V H A L S Y P L G A T Y H V A H G E S N Y A M F T G			
UniRef90_I1G8L8	L T D T F F F D Y L K E T I V V L A V K A Y T T K P L V P H G L S V V I S A P A			
UniRef90_Q1C0V6				
UniRef90_D3LUM8	N W A G I A F S I P G C A A V H A M S Y P L G A K Y H V P H G E S N Y A I E T G			
UniRef90_J1EKY6	S F A G G V A I H K S L G P A H A I A L A C G D Q R L H H G M M V A A A L P E			
UniRef90_F4LNE8	C L A S L A V A T G S P G P A S L L A L A V N A R F R I S R A L T V S I L F P Y			
UniRef90_A0A014M9M6	W L C G V C L D S T R M G L H H R L C H L L G G R F D T P H A A T H A L V L P F			
UniRef90_E2RTV7	C Y A G I A I T I G G T S I A H G L S Y K I T Y F K G V P H G K A C A I F L I A			
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UniRef90_D1BI28	T L L S G L G F E S G G L A A A H A I H N G L T A A P Q T H G L T H G Q N I G S			
UniRef90_K4SCL2	L C G G L A L A N			
UniRef90_UPI00047CC7E5	N Y A G I A F G N A G C A A V H A L S Y P L G A V Y H V P H G E A N Y A M F T G			
UniRef90_UPI000378D22C	L M G G L S L T Y S E V G V C H A L S Y G L S K I L L G M R H C Y A N C L I M N H			
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UniRef90_J9NCV0	E S D I E R A A Q I A T S N Q Y P N P R P L E F K W V F E L L R R A W A		
UniRef90_R5KGF6	E Q D L V E F T D S V M Q G R L M A N N F V E L D R D R V Y K I Y K E L F		
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UniRef90_E2RTV7	E E E V M D Y A I S L F A S G K N K M H P W P I T V P E V V G I I R Q S		
UniRef90_UPI00047BE1DA	P R T L D A V S V E A L A E R		
UniRef90_W7DTT6	E K K I M D V A K A S C A E G S I H N M P F K V T P E Q V Y A I L T A A L G		
UniRef90_F0RSH5	L S D I T V F D R C L D D P K L H N Q R P P L Q K E D L Y R M L E A		
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UniRef90_D1BI28	L E D L Q R V A E A V V E G E T I H N M P F P V T A A D V V D A L R		
UniRef90_K4SCL2			
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