

1 10 20 30 40

QUERY	K L S A L T F F A A P D Y D R Y P C L K L A M E A F E Q G Q A A T T A L N A A N E		
UniRef90_A1BJT7	K I G S L S F Q E P D P G R F P C L R L L A Y E S L E A G R T C P A V L N A A N E		
UniRef90_B8CW61	E L G Y L T F F K K P D T V K F P A L K L A Y E A G Q Q G G T M P V V L n a a n e		
UniRef90_Q81B49	E I G S L H F E K P D F K K F P C L Q Y A Y E C G K I G G T T P A V L n a a n e		
UniRef90_A7GQI2	E V G N L H F E K P D F K K F P C L Y Y A Y E A G K L G G T A P T V L n a a n e		
UniRef90_E8WQS3	L S G L T F F K P D T D R F P A L K L A Y R A S E A G E S M P A V M n a a n e		
UniRef90_B3EK13	Q I G T L T F F K P D M E R F P A L R L A F D A L K A G Q T F P A V L n a a n e		
UniRef90_K9SWZ0	K S G D L T F R S P D H F K Y P C M Q L A Y S A G R A G G S M P A V L n a a n e		
UniRef90_F6DU64	E I K A L T F F E Q P D T G R F P A L A L A Y A A G K E G G T A P A V M n a a n e		
UniRef90_T4BB47	K F S T L T F F E E P D L E T F P C L K L A Y E E C L K M G G T Y S S V L n s a n e		
UniRef90_UP100047BCEB3	E V G S L H F E K P D L K K F P C L H Y A Y E S G K I G G T A P A V L n a a n e		
UniRef90_K8E145	R L K G L T F F E E P D T E R K F P C I D L A F Y A G K T T G G T L P A V M n a a n e		
UniRef90_E1Y8V0	I I G S L E F F K K P D T E R K F P C I D L A F Y A G K T T G G T L P A V M n a a n e		
UniRef90_UP10003035F00	K I G S L T F F R E P D H H K Y P C M Q L A Y E A G R I G G A M P A V L n a a n e		
UniRef90_UP100034D04D6	K V G S L T F F R E P D H S K Y P C M Q L A Y D A G R A G G G C L P A V L n a a n e		
UniRef90_X1IAQ2	I I E N L T F F E P P D L D T F P C L K L A E A G K K G G T Y P A V L C A A D E		
UniRef90_A4SCF3	E I G T L T F F E E P D M V R F P A L Q L A F D A L K A G K T Y P A V L n a a n e		
UniRef90_X1TT11	L S R L T F F E Q P D F S R F P C L N L A E A G K K G G T S S A V L C A A D E		
UniRef90_UP10001E2C262	K S N A L T F F E E P D M K T F T C L S L A F E A L T K G G T M P A V M n a a n e		
UniRef90_D4TRK0	K C G T L T F F R E P D H H K Y P C M Q L A Y S A G R A G G S M P A V L n a a n e		
UniRef90_X5JM33	K S A D L T F F Q E P R I E K F P C L Q L A Y D A I K I G G T M P T V M n g a n e		
UniRef90_R6PBW4	E L K G L T F F E E P D T N R F P S L S L A Y Q A G K I G G T A P A V L n a a n e		
UniRef90_A4J5Y5	K I S N L T F F Q E P D Y D K Y P C I S L A Y A A G N T G G A M P A V L n a a n e		
UniRef90_D3EMS7	R L Q K L T S F Y P P D E E R F P C L R L A F D A C R K G S T Y P A V L n a a n e		
UniRef90_A0LJ69	Q V G Q L T F F R S P D P A K Y P C M E L A Y A A G R A G G T M P A V L n a a n e		
UniRef90_A5GM83	U G G L T F F E E P D I D T F K C C L R L A Y E E A M R A G G S A A A I L n a a n e		
UniRef90_I9KUB2	UniRef90_B8I6D9	UniRef90_UP1000362AD72	K V A R M D F E A P D F N R F P C L R L A Y E A I H A G G I M P T V L n a a n e
UniRef90_Q2LTQ9	R V G K L E F F F P P D V N R F P C L S L A C E A V R Q G G T M P V V L n a s n e		
UniRef90_H5XXU4	T L T F H E P D F F E A F P A L A M A Y Q A G R Q G G T L P A V M n a a n e		
UniRef90_UP1000469FFD8	K V G R L D F E A P D F R R F P C L R L A Y Q A L A T G G S S A P A I L n a a n e		
UniRef90_K8V247	Q L S S L T F T Q P D Y D R Y P C I S L K L A I D A C H E G Q A A T T I L n g a n e		
UniRef90_D4ZHR0	K V G Q L S F E P D F E R F P C L S L A I E A C K Q G Q E A T T V L n a a n e		
UniRef90_R7A300	E L G A L T F E E K P D T D T F Q G L P L A Y E A I N T G G S M P T V L n a a n e		
UniRef90_UP10003740BAE	V G R M D F Q E P N L E R F P P C L R L A Y E A I N A G G I M P T V L n a a n e		
UniRef90_I6ZHF2	Q I G Q L L E F F R A P D Q E R F Q P C L R L A R Q A A E Q C G T A P A M L n a a n e		
UniRef90_UP100047E1ABA	K A G T L L H F R P M D F E R Y P C I S L K L A Y E A G R T G G T A T T V F n a a n e		
UniRef90_UP100047BEEC4	E I Q K L L H F S K P D F T R F R C C L H F A Y E S G R I G G T M T T V L n a a n e		
UniRef90_F0F0B0	Q L N A L T F F S T P E K E R Y P C L Y L A Y Q A M K D G G S S P C V L n a a n e		
UniRef90_R5XXF2	K I S T L T F F E E P D M N T F P C C L Y L A Y D A L K E G K T Y L T V L n a s n e		
UniRef90_UP10002880B32	E I G K L L H F S K P D F D R Y R P C L R L A F D A L H R G G T A G A L L n a a n e		
UniRef90_V5PTE3	I I G K L T F F E A P D I R R F P C L R L A F D A L H R G G T A G A L L n a a n e		
UniRef90_UP100046A8EE8	Q I G S L L H F K E M D F I R Y P C L K M A Y D A G K M G G T M P T V L n a a n e		
UniRef90_N0APCO	Q V G Q L L H F T E M D F E R F R C L Q F A Y E A G K I G G T M P T V M n a a n e		
UniRef90_V5TDI1	K L K E L T F F Y A P D H Q K Y P C M Q L A Y A A Q G Q A G G C M P A V L n a a n e		
UniRef90_A0A031LZ26	T L L N F M Q P D T I R F P A L Q L A R E A M K S G G L A P A I L n a a n e		
UniRef90_A6TRL6	E V T S L T F F M E P D I E R F P C L S L A Y E A L V A G G T M P C V L n g a n e		
UniRef90_B5Y109	K L Q F E I P D T E V F P C L S L A Y E A L N A G G S M P A V L n a a d e		
UniRef90_M1V7B9	Q V G S L T F F R A P D H D K Y P C M Q L A Y A A G R R G G T M P A V L n a a n e		
UniRef90_A5D2U3	Q L Q G L T F F E E P D T R R F P C L S L A F E A G L A G G T M P A V L n a a n e		
UniRef90_U2SS49	R M R D L T F F E A P D M E T F K G L R F A Y E A G E M G G T M P C V F n a a n e		
UniRef90_C6IVZ6	E I G K L L H F R E M D F E R F P C L R L A Y E C G K I G G T A T S V Y n a a n e		
UniRef90_D5A051	K A G N L T F F K A P D N Q K Y P C M Q L A Y A A G R S G G S M P A V L n a a n e		
UniRef90_X1V2C9	I I N N L T F F E Q P D F D L F P C L R L A I E A G E K G G T Y P A V L C A A D E		
UniRef90_A2BXK2	E I G Q L T F F K K P D E V K Y P C M Q L A Y S A G K C S G T M P A V L n a a n e		
UniRef90_N9BG20	UniRef90_UP100041A30F7	A Q L N F R Q P D T Q K F P S L T L A R E A M R S G G L A P C I L n a a n e	
UniRef90_T0MPC0	E V G Q L T F F E R P D F E R F P N L R L A Y E A G R A G G F A P C V L n a a n e		
UniRef90_M1X1T0	V K T L T F F Q E P D T E K F P A V K L G Y Q A L K L K G T A P A V L n a a n e		
UniRef90_UP100036D95EA	K A G K L T F F Q E P D H H K Y P C M E L A Y S V G K I G G S M P A V L n a a n e		
UniRef90_K9TDD0	A G A L S F E T P D L V R F P C L G L A F D A L R A G G L A P A V L n a a n e		
UniRef90_M1WMW7	K A G D L T F F R S P D H H K Y P C M K L A Y A A G R A G G S M P A V L n a a n e		
UniRef90_A0A010Z700	Q V G T L T F F E D P D E E A F P C L R L A R E A F A A G Q S H P I V L n a v n e		
UniRef90_UP100031BC44F	E I G K L N F R E M D F G R F P C L R M A Y D C G R M G G T A P T V F n a a n e		
UniRef90_C5D9C1	L S S L T F F E K P D M D T F Q C C L S L A Y D A G K A G G N M P A I F n g a n e		
UniRef90_UP100047B5187	E I S T L T F F E R V D F E R F R C L Q L A Y E A G K A G G S L P T V L n a a n e		
UniRef90_B3DYH8	V R Q L D F F E A P N E A R F P C L S L A Y E A V R A A G T M P A V L n a a n e		
UniRef90_V3TU41	E I G D L T F F E A P D H K S F P A L N L A R F A G E A A G T Y P C A L n a a n e		
UniRef90_R5ZSF1	R L G A L T F F S A P D Y H R Y P C L R L A I E A C N Q G Q A T T T L n a a n e		
UniRef90_C9KQN7	E I G T L T F F E Q P D A Q R F P C L Q L A Y D A L E R K G N M P C I L n a a g e		
UniRef90_UP100046381DB	K L K D L T F F E K P D T D T F K G L R F A Y E A G K M G G S M P C I F n a a n e		
UniRef90_UP10002485B0B	R L G E L S F I P V D F D R Y P C L K L A I E A C W A G Q S A T T A L n a a n e		
UniRef90_G8QP7D	S Q L D F Q A P D V A R F P A L L R H M A Q G G L A P S I L n a a n e		
UniRef90_G4FC83	Q V G R L D F Q E P D P D N R R F P C L S L A Y R A L A E E G S A P A L V n a a n e		
UniRef90_D4W315	Q V A R L D F F E A P D E V R F P C L G L A R E A M L Q G G M A P V V L n a a n e		
UniRef90_E0E183	E V G T L E F F K P D M D F E R F P C L K M A Y E A G M Q G G S C P T V L n a a n e		
UniRef90_K9UHJ1	K V A S L N F Q R P D L E V F P C L Q L A L A Y R A L R E G G S T A T V L n a a n e		
UniRef90_UP10001746326	K A G D L T F F R A P D R V K Y P C L E L A Y A A G R A G G S M P A V L n a a n e		
UniRef90_UP1000255C496	R L A A L H F E A P R V D F V P A L R L A R E A G E A G G T L P A V L n a a n e		
UniRef90_D5BVW7	E I G S L H F Q K M D T H R F P C V S L A Y H A G K T G G S M P T V L n a a n e		
UniRef90_Q31N26	K A G Q L T F F S R P D L Q R F P C L G L A Y S A L E Q G G G T C S T I L n a a n e		
UniRef90_B9L006	R I G P L E F F F P P D T E R F P A L P L A R E V G I A G S T Y P T V L C A A D E		
UniRef90_G5G8Z3	E I Q T L H F E K A D R E K F P C I Q L A Y D A C Q R G G N I P C I M n a a n e		
UniRef90_R5QRQ5	K I A S L T F F K K P D F E R F R F A L A L A Y Q A G K S G G S M P C V L n g a n e		
UniRef90_A3YV39	E V G Q L T F F F A P D E Q K Y P C M Q L A Y A A G R A G G T M P A V L n a a n e		
UniRef90_E3DRY0	Q L T A L E F F F K A D T E K F P N L K Y A T A G K A G G T F P A V L n a a n e		
UniRef90_UP100028894C6	E M G T L H F Q K V D L K R Y P A V A L A Y A A G K A G G S M P T V L n a a n e		
UniRef90_G4CTF3	L N G L T F F K T P D F N R F P C L K L A Y Q A M Q A C G N A P C V L n a a n e		
UniRef90_B0UU14	Q L S G L T F F L K P D Y Q R Y P C L K L A I E A F S A G Q Y A T T A L n a a n e		
UniRef90_L8LIP9	K V A N L T F F K E P D H H K Y R P C M N L A Y A A G K A G G S M P A V L n a a n e		
UniRef90_C4L858	R V G E L S F I P V D F E R Y P C L K L A I E A C W A G Q G A T T A L n a a n e		

QUERY UniRef90_A1BJT7 UniRef90_B8CW61 UniRef90_Q81B49 UniRef90_A7GQI2 UniRef90_E8WQS3 UniRef90_B3EK13 UniRef90_K9SWZ0 UniRef90_F6DU64 UniRef90_T4BB47 UniRef90_UP100047BCEB3 UniRef90_K8E145 UniRef90_E1Y8V0 UniRef90_UP10003035F00 UniRef90_UP100034D04D6 UniRef90_X1IAQ2 UniRef90_A4SCF3 UniRef90_X1TT11 UniRef90_UP10001E2C262 UniRef90_D4TRK0 UniRef90_X5JM33 UniRef90_R6PBW4 UniRef90_A4J5Y5 UniRef90_D3EMS7 UniRef90_A0LJ69 UniRef90_A5GM83 UniRef90_I9KUB2 UniRef90_B8I6D9 UniRef90_UP1000362AD72 UniRef90_Q2LTQ9 UniRef90_H5XXU4 UniRef90_UP1000469FFD8 UniRef90_K8V247 UniRef90_D4ZHR0 UniRef90_R7A300 UniRef90_UP10003740BAE UniRef90_I6ZHF2 UniRef90_UP100047E1ABA UniRef90_UP100047BEEC4 UniRef90_F0F0B0 UniRef90_R5XF2 UniRef90_UP10002880B32 UniRef90_V5PTE3 UniRef90_UP100046A8EE8 UniRef90_N0APC0 UniRef90_V5TDI1 UniRef90_A0A031LZ26 UniRef90_A6TRL6 UniRef90_B5Y109 UniRef90_M1V7B9 UniRef90_A5D2U3 UniRef90_U2SS49 UniRef90_C6IVZ6 UniRef90_D5A051 UniRef90_X1V2C9 UniRef90_A2BXK2 UniRef90_N9BG20 UniRef90_UP100041A30F7 UniRef90_T0MPC0 UniRef90_M1X1T0 UniRef90_UP100036D95EA UniRef90_K9TDD0 UniRef90_M1WMW7 UniRef90_A0A010Z700 UniRef90_UP100031BC44F UniRef90_C5D9C1 UniRef90_UP100047B5187 UniRef90_B3DYH8 UniRef90_V3TU41 UniRef90_R5ZSF1 UniRef90_C9KQN7 UniRef90_UP100046381DB UniRef90_UP10002485B0B UniRef90_G8QPD7 UniRef90_G4FC83 UniRef90_D4W315 UniRef90_E0E183 UniRef90_K9UHJ1 UniRef90_UP10001746326 UniRef90_UP1000255C496 UniRef90_D5BVW7 UniRef90_Q31N26 UniRef90_B9L006 UniRef90_G5G8Z3 UniRef90_R5QRQ5 UniRef90_A3YV39 UniRef90_E3DRY0 UniRef90_UP100028894C6 UniRef90_G4CTF3 UniRef90_B0UU14 UniRef90_L8LIP9 UniRef90_C4L858

	50	60	70	80
I T V A A F L A Q Q I R F T D	A A L N S V L E K M D M R E P Q C V D D V L S			
I A V A A F L D K R I G F T D	A D T V D K T M Q A H E A Y T P V S L E E Y L S			
I A V S A F M N E K I T F D K	P V V I E R V M E N H Q I I S S P D L E D V I E			
I A N A L F K N E I A F F D	E K T I Y K T V E A H H N V K D P S L D A I L E			
I A N A R Y L Q N D I S F F D	E K T I Y S T L E A H D T I I N P S S L E A V L A			
I A V E A F L A G K I G F M A	A R T I E K V M D L H A P R A L K S I L E E E V L A			
I A V A A F L D K K I G F T D	P A I A D R T M Q A H D P Y T P S G L D E E Y L A			
I A V D L F L N E K I T F L Q	P Q L I E Q T C D R H D H T N P N L E D I I E			
Q A V D L F L N E K I T F L Q	P R V V E K T L L N A H Q T F K P S S L E E I I E			
I A V H A F L A G E I Q F L D	P Y Y I E K T L L E V H S S I S E P T L E E I I E			
V L V S E F L E D K K I G F Y D	P Y Y I V A K T L L D K Y Q P V N P A G M L L S D I I L D			
I A N A L Y L Q N E I S F F D	E K T I Y S T L E A H H N I I N P S S L E A V L E			
I A V H A F L A G C I Q F L D	P Y Y I V A K T L L D K Y Q P V N P A G M L L S D I I L D			
V A V H A F L A G C I Q F L D	P Y Y I V A K T L L D K Y Q P V N P A G M L L S D I I L D			
I A V E A F L N R K K S F I Y D	P R L I E Q V C D R F S A H N Q P T L E D I I L D			
Q V V A L F L E E E K I R F L E	P R I I E S V C D R F Q N K S N P S L L E D I I L D			
Q V V A L F L Q E E K I G F L D	P R I I E S V C D R F Q N K S N P S L L E D I I L D			
V A V E L F L S Q G I G F T D	A R L V G Q A L E E H Q Q A I S H P T V E E I I M A			
I A V A A F L N K Q I G F T D	A D T V D K T M Q A H E A Y T P M E L L D E Y I H			
V A V E L F L S Q R I K F T D	A Y L V K Q T L E Q H Q P V A H P T L L E E V L A			
E A V S L F L K E K I K F V D	P K V I E N V M A K H Q V I Q D P T I L E E N I L L D			
Q A V A L F L E E E K I G Y L D	P A C I E L V C D R H Q N Q S H P S S L L E D D I L L A			
E A V A L F L E E E K I G F L D	P R C I E W V C D R H Q A Q A N P K L L L D D I L L A			
I A V A K F I N R E I G F L D	P R L I E T A M N A Y T S I S D Y T L L D D I V L E			
V A V H A F L A G Q I K F M Q	P S I V K R T L N E H Q F Q G S P V L L E E I I L E			
Q V T S F L N K E I A F L D	P R I I E K T C D L F N N S S Q P T L L D D I I L E			
V A V G A F L D E K I A F P D	P G V I E T A M G K H K A P A K P D L L D A V I A			
E A V A Q F L E E E R I H F L D	P D L I E A A C E R H D R I D H P Q L L D D V L A			
V A V E A F L D G C I C F T D	P D L I T R T L E R C T A D T P T S L L D D V L E			
I A V A A F L E N H G F T E	A E T I E Q V M Q R H N V N I C P C I E D I I E			
I A V E A F L D G Q I R Y T D	A V V I E R C M K A I P V R P A D T L L D V I L E			
V A V E A F L A K R L P F T R	S E L V D R A M S S H Q C M T S P E I E D I I L E			
V A V S A F L Q K K V S Y L G	H D I V G N V C S E H H V L D N N M D L L E S I L L D			
V A V E S F L A C K M P F T A	P A M I E D V M Q T I G R Q D I A T L L D D V L D			
V A V E S F L A C K M P F T A	P A M I E D V M Q T I G R Q D I A T L L D D V L D			
I A V A A F L D G K I R F L Q	A K I N L A T L E K H L S E P V S I L L D D I I A			
I S V A A F L E N K L K F T D	A K I N E T C L N K V S M S S L T S I L L D D I I A			
R A V A L F L D H K I R F L Q	Y D L I R G A M E N H K P I A D P T V E E I I L E			
I A V D A F L N E R V R F T D	P V I I E R C O C M K E F D A K P A D S L E I I I L D			
I A V E A F L Q G R I R F T D	A S I I E S V L E R Q A S V A V R C I E D V L A			
S A V A R F L R G D I P F L A	E T I I E R V V L A K H T P T P H D L L A A I L E			
M A V A S F L E E G K I S F L D	E Q L I E K K S L E K H H D A I A D P S L I D D I L E			
I A V A A F L Q Q H R F T D	A N V V R H C L E K H S Q S S L H S I I E Q L W H			
V L V E K F L K D Q I G F Y D	P Y Y I E K S K L D A H N S I I N P K L L D D I I Q Q			
V A V S G F L N G K I S F L E	E E L I E G T M E K H D T I K N P S S L D D V V L E			
I A V A A F L E G R I R F T A	A Q V V E Q V L D A V A V G E A T S L D D V V L E			
V A V E R F L R S E I S F L Q	E E M I Y R T L E Q H Q P I S S S P Q L D E I I K E E			
A A V S A F L D G K I S F L Q	E D L I E K K A L T A H Q S I K N P S S L E T I I Q E			
Q A V A L F L E E E K I Q F L D	P R L I I E Q V C D R Y D N C S S P T L L E D I I I A			
I A V E A F L K D K I K F L D	P K V V E S T L S H V Q N S N A D S L L E E L I L E			
V L V S Y Y L N G E I I G F Y D	P K Y I I E K A M S A H R V L E Y K T V E E E V L E			
V A V E A F L S G R I K F K E	Y K I I K K V M D A H K I V S V S S I I E E V L E			
V A V E L F L R N E L L E F F M G	P A V I I E R T M Q R H D T S D T P T L L D D I I A			
V A V E F F L K G L I P F L G	P S V V R S V M E K H E M A S D P G L L E E E I I E			
V A V G A F L R G G I H F L D	Y D I I E A T M M N R E C V L S P T L L D D I I L E			
A A V A R F L K G E I P F L Q	E A I I E T A L A K H E V Q S H P D L L E T I I R E			
Q A V A L F L D E K I K F I D	P K V I I E M V C A R H D N C Q N P S S L D D I I L A			
V A V E L F L S E R I K K F I D	P N L I I E Q T L E Q H Q A I V H P T L L E E E I I M A			
M A V D Q F L K E K I S F Q E	P T F I I N K T C E A H K L N L N P N L I I E D I I L E			
I A V E A F L N H K F T S	P E V V E H V L N H V Q N D K A T S I I E H V L E			
V A V E A F L S K R M T Q M A K L	P E V V E H V L N H V Q N D K A T S I I E H V L E			
V A V N C F L E E E K I P F S R	C P I I V E E V L S S H S V I S A P S S L D D I I L K			
Q A V A L F L E E E K I R F L D	P L C I I E W V C D H H K N Q N N P T L L D D I I L A			
V A V E A F L Q G R I R F T D	A R V V A G V L E R A P G G N A D T L L E A V L S			
Q A V E L F L E E E K I A F L D	P R V I I E R V C D R H D N C A E P G L L E E E I I A			
V A V A A F L N E K I H F L D	P Q M I I E Q A L T S H Q A I V K V D T P S A I L E			
V A V A A F L R R E I S F F L Q	E E T L I E K V V M Q Q H T A I I A D P D L L D V I R E			
I A V E L F L N N K I K F Y L Q	E E I I I E C M M N F E H I T N P T L L E E Q I I D			
E A V S A F L Q G R I R F T D	E E Y I I E R A L E R H E F V I N E P S L L E E I I R E			
V A V A S F L D L K I R F T H	P E I I I R H C M T T I A P E P A D T I I E A V L E			
V A V E S F L E G K I S F S E	W E C V G A V L D N H K Q T P D P Q L L E E E I I L E			
V A V E A F L R L G I R F T D	A A V N Q S V L E Q L A P E P D S V D D V L V			
V A V E A F L R L G I R F T D	A A V N Q S V L E Q L A P E P D S V D D V L V			
I T N A A F L N E R I S F S R	P Q I I I A Q A M E Q V D F I P Q P T L L D D I I F Q			
V A V G A F L K G A I H F L D	Y D I I I E Q T M M K R A C I L E P T L L E E E L F E			
V A V E A F L N T R I G F T Q	V E P Q V V E H T L N H V Q N G S A D S I I E T I I L A			
V A V A S F L Q Q Q I S F T A	P R V I I E A T L D A I P A V A V G S L L D D V L M G			
V A V E A F L A G T I S F T A	G Q L V V A D V L S R P Y E G R V D S S L L E S V L A Q			
A A V D L F L R N K I S F L E	E T V V V A E A L N K H Q K I I D H P S S L L E Q I I L Q			
V L V E F F L N D R I G F Y D	P K Y I I E M A M D H A F I D Q P S S L L E D I I I N			
Q A V A L F L S E E K I H F S D	P K V I I E K V C D K H D L T L T P S S L L E D D I I L A			
V A V A F L N E R L K F P A	W A T V E K V V M Q K H S N I V E H P S S L L E A I I I E			
A A V Q A F L A G K I A F L D	E R Y V E R A L T N H H V I K D P D L K T I I E A I I E			
V A V Q A F L A G R I R F T Q	P E L L I E W T L G R V T P I A A H S P S S L L A A V L E			
Q A V A L F L E E E Q I H F S D	P R L I I E R A C D R H D N S L T P S S L L A A V L E			
V A V A F L A G Q I R F T E	V P L I I R S V L D R H P A S E P L T L L E A I I I A			
V V N R A F R E T K I G F M D	P R I I I A Q A M E E V P F I I T T P S S L L E D Y F T			
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Q A V A L F L E E E R I A F L D	P L L I I E A V C E R H D L Q D P S S L L D D V L L A			
V A V Y S L F L K G K I P F L A	S Q V V V A V A L D Q H Q N I S Q P N L L E A I I L R			
T A V D L F L D G K I R F L D	E P L V G D A L D H H Q I I A S P D L L D A I I E E			
V A V D A F L A E K I R F T D	A R V V A H C L E Q N F S N D G K S L L E S V L L A			
V A V Q A F L A G R I R F T Q	V E P Q V V E H T L N H V Q Q P S S L L E D V L L I			
V A V Q A F L A G R I R F T Q	V E P Q V V E H T L N H V Q Q P S S L L E D V L L I			
V A V Q A F L A G Q I R F T E	V E P Q V V E H T L N H V Q Q P S S L L E D V L L I			
V A V D A F L S G K I G F T Q	H T V V L D V L S E L K Q A N N D L L E S I I L A			

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QUERY	V D A N A R E V A R K E V M R L A S
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 E | I G R | L | H F E K M D E E R F Y C L | C L K L A Y E A G K G A G G S M P A V L | N A A N E
 K | V G Q | L | S F [C] E P D F D R F P C L | R M A Y E A G R T G G T A P T V F N A A N E
 K | A G T | L | R F E R M D F G R F P C L | R M A Y E A G R T G G T A P T V F N A A N E
 Q | M K D | L | T F E K P D T D T F R G L | A L A Y E A G K I G G G S M P C V M N A T N E
 R | M G A | L | T F A E P D F A R Y P C L | K L A M D A C E Q G Q A S T T T L | N A A N E
 E | I G P | L | S F [I] E P D Y Q R Y P C L | K L A M D A F Q G Q A S T T T L | N A A N E
 E | I G K | L | H F E E M N L E R F R A L | K L A F D A G R A G G S M T T V L | N A A N E
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 E | Y G Q | L | H F A K M D Y D R F T C L | K L A Y E A G K G R G G T M T T V L | N A A N E
 S | H | L | N F Q Q P D T Q K F P A L | N L A R Q A M R D G G L A P T I L | N A A N E
 L | G P | L | T F E A P D L V A F P G L | K I A Y D A G R A G G T V P C V M N A A N E
 T | L T F E E P D M K R F P M L G L | A Y K A C S L G P L H P A V Y N A A N E
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 E | I G K | L | H F E E M D F E R F R C L | R F S E A G K G A G G S M P A V L | N A A N E
 A | S T | W T F E P V D D E V F P A V R | L A R Q A G E A G G S V T A V Y N A A N E
 S | L | T F E E P D T K R F Q C L | K L A L A Y E A L E K G G T A P A M N G A E
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 Q | L G R | L | D F E A P D P A R F P C L | P L A Y E A L R R G G T A P A V L | N A A N E
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 L | S | Q | L T F E T P D F E R F F P C L | R M A L A Y E A A E T G G A H T I A L | N A A D E
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 S | Q | L | N F Q A P D T T R F P A L | R M A L A D A W F M G G T A M A V L | N A T N E
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UniRef90_K4L493	I C V H A F L A G R I K Y L E M H E L V E R T C Q A H Q V L E E K D L L D T V L L T			
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UniRef90_UPI00041AF980	V A V Q F F L D K K I K F L E I G D I I E E S I N Y F E C K K E L S L D N V I E			
UniRef90_C3X1F7	V A V Q A F L E E Q R I S F R R I D D V V A R V L L D K V P T E S S I L T I D S V L L M			
UniRef90_R7KNA7	I A V E A F L D R R I P F L D A R A C R Q M M D S V L A A P K S L E E V L M A			
UniRef90_N6W8F2	I A V A A F L K G Q I G F T D I Y K I N Q T L D A A T F T N V Q S L L D E I I L A			
UniRef90_UPI0003063019	E A V Q M F L N K E I S F L T I E S L I E K A L E F H S P I S N P N L D T I I I M			
UniRef90_F0M7A6	E A V T A F H A G R I R F T D I V D T I G A V L S E H S G S S G L T V E E V L L D			
UniRef90_G3ADQ6	I A V T A F L R G D I R F T D I A S I N R V L D H G D L P E P D S V E E V L Y E			
UniRef90_T0MAM7	V V V D A F L K D K I S F L G M S D V I E T V L E K V N Y L A R P S L D D Y I E			
UniRef90_H1G4H6	V A V D A F L S A R I R F T D I P R L I S H A L E T L P H Q E A D S L E R I I L A			
UniRef90_W7Y5K8	I V V E A F L E K K I I A F L D M P G I I E E T M V K S S F L S K P T M D D Y F E			
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UniRef90_R5E597	I G V E A F I Q G K I G F T D I A R L C H A M M Y G F Q P P T P T N L E E I I L E			
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UniRef90_H1PYU3	V A V E E A F L F M G K G F F L T I Y E I I E G A M D R H E P V E I N S V E T V K T			
UniRef90_G4Q317	V A D D A F L K G Q I P F L T A M A D L I E A V L S K V E P V S P L S Y E T I V E			
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UniRef90_V8BTE0	R A V A M F L D R K I V G L Q I P E L I Q A C M E A H K N I P S P T V E E I V L K			
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90

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UniRef90_P57985	V D K K A R E L S Q S I I L S F S
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UniRef90_C9LDV1	T D S E A R R I A A S L I
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UniRef90_N2AK27	T E Q E T Y A Y I
UniRef90_W4BR00	C D R R V R E L A A T L
UniRef90_D7D116	I D A H A R L M A R K Q I S A L
UniRef90_UPI00038201D9	V D N A A R R F A Q A E I T K
UniRef90_N9CDA7	A D Q N A R A Q A Q Y F V L N K G S
UniRef90_M1FHY4	K D S E A R Q F A Y A C V T K L A
UniRef90_R5GB57	T E Q W V
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UniRef90_U3BMR5	L D R M T R S L A L E I V R E R S
UniRef90_U1QAJ5	V E T W A R T R A D E L I A A R N G
UniRef90_W4F1E2	V D K E T R K S V Q S M I K
UniRef90_UPI0002D8EF34	T D A A A R E T A L S L I
UniRef90_W4C842	C D Q E S R K L A A S L
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UniRef90_UPI00026CD16B	V D A E A R R M A R G H V G S R G G
UniRef90_UPI000470EC91	T D M Q T R K I V H S M I K
UniRef90_UPI0003B77A7A	Q D A D S R E Q A R L W I K N
UniRef90_I2ESV7	T D K E T R R L A L E F V
UniRef90_UPI000407DA5F	A E A E T Y A Y
UniRef90_R5L631	I E Q W A Y E L I E N
UniRef90_E8M7P9	L D R M A R E L A E K W I S E R
UniRef90_W2BSE9	A D A W A R G R A S E I I E S
UniRef90_R7HUQ5	I E Q E V Y E M I E K
UniRef90_D7JDP6	T D R E A R A R T S E K I K
UniRef90_N2J373	A D R H A R D S A N V W L E R
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UniRef90_UPI0002F0840A	L D R M A R I L A R E Q L
UniRef90_L7VJW7	V D R L A R E E T L N I Y K K
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UniRef90_UPI000371D7BA	E D A R A R R V A E R Q L A R
UniRef90_R6W3Y2	T D A E A R R V A T E L M
UniRef90_C9QMK2	L D R I A R E L A V T I V S G L
UniRef90_Q2C048	L D K Q A R Q L A S D V I T K
UniRef90_UPI0003740F27	A D L A A R Q Q A R E V I A
UniRef90_UPI0003B3D175	T E K E T Y S Y I E E
UniRef90_E6SRQ4	T D E E A R K I A M E M V A
UniRef90_D4KQK7	T E Q A V Y E Y I G Q
UniRef90_UPI00041AF980	L D R K V R E Y V
UniRef90_C3X1F7	H D R A A R T V A T N L I L Q
UniRef90_R7KNA7	A D R E A R I K T R E V I A Q W
UniRef90_N6W8F2	C N Q Q A R Q R A A D L I T K V
UniRef90_UPI0003063019	V D Q E V R E Y V K S I
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UniRef90_G4Q317	A D R K A R E V A R T L L S S M G
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UniRef90_R5DCP5	T E A E T Y E R I E S
UniRef90_UPI000463E93F	V D A Q A R R H A T L A L S R H A A
UniRef90_V8BTE0	T E Q A T Y E F I K N
UniRef90_E8JLN0	V E R W A R E R A R E E
UniRef90_A7MXZ4	L D R M S R T I A L E F L R E R S
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1 10 20 30 40

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A N F T F V E P D Y N R Y P C L K L A I | Q A C Y E G Q H A T T T L | N A A N E
L G S L T F E R P D F E R F D C L R I A Y E A A I | G G N M P C I V | N A A N E
A R L E F Y P P D T T R F P A L E L A Y A A G R M G G L A P T V L | N A A D E
G K L T F E K P D Y D T F K C L S A A I | E A I T R G G A Y P C L V N S A N E
Q C G G L A F E E Q P D H E R F P A L R M A Y D A L A M G G V K P A V L | N A A N E
N L T F E Q P D M E T F R N L K L A F Q A L R T G D G A C A P C I L | N A A N E
V A E L N F E E R V D P V R F P A L N L A F E A L R Q G G T A S A A L | N A A N E
A G R L D F E A V D E R R F P C L R L A Y Q A L R T G D G A C A P C I L | N A A N E
R A Q S W T F E P L D H D A F P A V R L A A E V G R T G G T A P A V Y | N A A N E
L N K L H F D Q L D N C S Y P C F Q L A D A D N C S Q S A T I I L | N A A N E
I A N I T F F K P D R D K F K G F D L A F K A G K T G S L P T I Y N A A N E
Q L N G L T F E L A P D S H R Y P N L K L A D A F T A G Q Y A T T A M N A S N E
L K K S I S F E E P D I K T F R G L Q L A Y D A A A G G S M P T V F N A A N E
K V G S L T F F R E P D H H K Y P C M K L A Y A A G R A G G G A M P A V L | N A A N E
S L T F E K P D T D T F Q N L S L A Y E A A L R K G G N M A C I L | N A A N E
K V K N L T F F E E P D F D T F F L L K L A Y D C A K E G E S Y P I V L | N A A N E
I I Q Q L N F E E A P R H D V F P A L K L A A R A F E A G G T A P A I F N A A N E
M R D F T F T E P D Y A R Y P P N L K L A E A C R L G Q A T T T L | N A A N E
K Y G S L T F Y A P D D K K F P S V N L C Y A Y A A G R A G G G T M T G V L | S A A N E
L G E L S F F T P D D D K F P S L P L A Y E A A G K I G G T M P C V L | N A A N E
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A R L D F E R M E R F P C L Q L A Y E A H G C G G Y A T I A L | N A A N E
E L A K L E F F E A P R R Q D F P A I D L A V R A G T Q G G T L P A V Y | N A A N E
K L G S L T F K A P D N V K Y P S M D L A Y A A A G R A G G G T M T G V L | S A A N E
L G T L H F E R P D V E R F P C L A I A Y E A L H R G G N M P C V V | N A A N E
G T L E F F I P A D P E V R F P A L R L A R Q A L R A G K A V P A I L | S A A N E
R A H T W T F E P L D H E A F P A V R L A C E V G S A G G T A P A V Y | N A A N E
V G I T L S F E E K P D L D R F P C L Q H C D A G K T G G T L P T V L | N A A N E
I I G Q I T F E K P D M E N F P G L A L A Y E A G R I G G T M P T V F | N A A N E
L G K L H F S E E M D M S R Y P C M K F A Y D A G R A G G G T M P T V L | N A A N E
Q L T F E Q P D L E T F R N L Q L A F D A L A K G G N A P C V L | N A A N E
R L G S L T F F E A P D E T R F P A L R V A R A A L R R G D T A P A V L | N A A N E
R Q L G Q L T F F E P D K Y P C I S L A Y A A G R R G G T M P A I L | S A A N E
E I S S L T F E K P D I D T F K C L R L A F E A G K Q G G L M P T I L N G A N E
Q L K E L T F F I E P D F V R Y P N L K L A M D A F T E G Q Y A T T A M N A A N E
K A M D W R F E P L D D E A F P A V R L A R Q V G E A G S T Y P A V Y | N A A N E
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G E L T F F F A P D E E R F P A T R L A R E A A E A G G S A P A V L | N A A N E
T W E F E P V D N E V F P A V E L L A R Q A G T A G G G C V T A V Y | N A A N E
S N L T F E A P D T K T F R N L A L A F E A L S I G G N C P C V I | N A A N E
R L S E L T F F I E P D Y S R Y P C L K L A D A C Y E Q G H L T T A L | N A A N E
E S Q F T F E Q P D I E R F R N L A F A Y Y A M D K G G N M P C I L | N A A N E
E L S G I T F E K P D T D T F R G L L G Y R A G E T G G S M P T V Y | N A A N E
L E F F E P D T E R F K C L T L A Y D A L G K G G N M P C I L | N A A N E
Q L S Q L T F F A Q A C P Q R Y P C L K L A D A C W A G Q A A T T C L | N A A N E
Q L L S A L T F F Q K P D F G R F P C L K F A Y E T I N A G G A A P C V L | N A A N E
K L G Q T F F E E P D M E T F L G P M A V Q A A R E G G S M P T V F | N A A N E
E I G S L T F F Q E I D R Q K Y P N M D L A Y I A G R K A G T M T C V L | N A A N E
G R L D F E E A P D T A A F P C L R L A W D A L R A G G T A P A I L | N A A N E
K L E K L T F F E K P D M E T F G C L R L A Y E V G K K G G N L P T I L N A S N E
L G E L T F F E P V D E G A F G C L R L A R E A E A G L A G G T I P C V L | N A A N E
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U n i R e f 9 0 _ L 0 K 7 Z 0
U n i R e f 9 0 _ D 5 X 3 C 7
U n i R e f 9 0 _ K 1 J M 8 8
U n i R e f 9 0 _ C 6 P Q X 7
U n i R e f 9 0 _ R 6 E 5 W 1
U n i R e f 9 0 _ D 4 M P L 2
U n i R e f 9 0 _ W 8 X 3 W 1
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U n i R e f 9 0 _ U P I 0 0 0 3 7 1 1 B 1 4
U n i R e f 9 0 _ A 0 A 0 3 7 Z 9 T 9
U n i R e f 9 0 _ L 1 P L 3 5
U n i R e f 9 0 _ F 4 H D J 6
U n i R e f 9 0 _ K 2 Q J R 6
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U n i R e f 9 0 _ G 5 G F G 1
U n i R e f 9 0 _ U P I 0 0 0 3 6 B 8 3 A B
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U n i R e f 9 0 _ U P I 0 0 0 3 8 0 A 6 2 5
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U n i R e f 9 0 _ Q 7 X Y T 1
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U n i R e f 9 0 _ D 3 P S W 2
U n i R e f 9 0 _ K 0 F 3 3 2
U n i R e f 9 0 _ U P I 0 0 0 3 9 5 6 6 5 F
U n i R e f 9 0 _ H 1 H P 1 2
U n i R e f 9 0 _ U P I 0 0 0 2 F 0 C 9 0 5
U n i R e f 9 0 _ J 0 X 1 L 7

	50	60	70	80
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UniRef90_F2NQJ5	V A V E A F L A G R I P F T R P E I I S R V L E D T P R E P V T W E S V Y R			
UniRef90_UP10001C36E8C	E A V R A F L H D E I K F I Q G E I V S S V L D K F E Y F D I N S Y E D V T K			
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UniRef90_K1LYW4	I A V A A F L R D E V G F L E M S D L I E E T L Q K S T F I S H P T L N D Y I D			
UniRef90_G2J9V3	I A V D A F L R G R A R F T E T A V I E R V L E R F E P G A A H T L E E F T			
UniRef90_A1WX15	I A V D A F L D G R L R F D R A P V I E D A L A A E T P P P P K D L D S A R A			
UniRef90_UP1000348BAAE	E A V D A F L G G K L S F T S M D T V A Q V V S E H Q R T D Q P T L D D E V Y A			
UniRef90_Q493C8	I A V E A F L R K M I S F T D P D V I R R V L D A I N L N D P N D I E D I L Y			
UniRef90_R5P3V5	L A V S K F L N E E I F R L D P E L I E T A M N N H K V I D N P S L E Q I L E E			
UniRef90_I3D6D3	I A V D A F L N K M M K F T D A T V I N K K V V E L I Q P Q V I N S V D D V L E E			
UniRef90_R7N5D0	K A V G L F L D K K I R F L A Y D L I Q G A M E Q H K V I A N P T V D D I L E E			
UniRef90_B7KAT5	Q A V A L F L E E R I G F L D P R L I E T V C D R F T N Q A H P T L D D I I S			
UniRef90_UP1000368EA8D	I A V E K F L Q D E L T F F L E M P D L I A E C M A K V P Y I A I P T L D D Y I Q			
UniRef90_E4S4E8	E A V K Y F L E G K I G F V D M K Y V A K I I E G H R L Y L Q K L E T V E D I L V			
UniRef90_Q1N1W8	V A V S A F L R E Q I S F L S S Q L V E R C L D A I E I E P A K N L E V I L S			
UniRef90_V4HFR0	V S V A A F L K N Q I G F M D F K V I N E Q V L S M S A L S E V N S L E E M D			
UniRef90_F4ZZ27	K A V E M F V E E K I Q K R I S Y L D F K V V E L T C Q E H E L V A S P S L E E I H			
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UniRef90_UP10003605B63	V A V D A F V D K K I K F T D W K L V E H T M D T H P W N A G K T L D T I I Q			
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UniRef90_UP100046F40CA	I A V E A F L A E R I L A F P A M D T V S R V V S E H Q R T E H L S L D D V L H			
UniRef90_D7B504	E A V D A F L R G N N L A F P A M D T V S R V V S E H Q R T E H L S L D D V L H			
UniRef90_U7DA45	E A V T L F L E E K R I A Y T D E R I I G N E L A A H T P A P L S S V D D T L M S			
UniRef90_R5TKG4	R A V A K F L N R E I S Y L T T D M I E G A M K G H T V K E N P S V D E I L E			
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UniRef90_D8JZB1	I G V Q A F L N R R I K F L L E A K L V E E T L D A A E R Q A A Q C L D D I L S			
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UniRef90_W5WQ29	E A V A V F L N G S L K F P Y V D T V A E T M E H H L S A A P P S L E D D V L A			
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UniRef90_Q2NBT8	I A V A A F L D G Q I P F T R A L S V E D T L A Q S D P P A P T S L D D V L A			
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UniRef90_H1Q3G5	V A N E A F R N A Q C S F L A A D I I E R T M Q S V T F D A S P D L D V Y L Q			
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UniRef90_R5XQ07	L A V K K F L H E E I R F L D Y D I G Q S M E R H K K T E S P D L D D I L A H			
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UniRef90_UP100036B61DB	V A V S A F L Q Q G Q V G F F L A P A L V E H T T T L Q R V N A D S L D T L L F			
UniRef90_L7EMK4	I A V E L F L Q N K I K F F L Q Q E I I E D S L D Q F E Y F K E V D I D M I L N			
UniRef90_E1R048	V A N H A F R K G S S C G F F L D E R V V E R T V D A F T R A D V Q S L E E T Y F E E			
UniRef90_J9FTP7	V A N L A F R E E R L L S F C G V A E V I E E K T I Q Q A T L E M H P T L E Q L A E E			
UniRef90_L0K7Z0	I A V S K F L S H Q L N F N Q P E L I S K V I S N H Q V V Y K P T L D Q L Q			
UniRef90_D5X3C7	V A V D A F L H Q R I R F T D H R I N A D L L A S A Q C G C D S L E A L I A E			
UniRef90_K1JM88	I A V E A F L E G R I G F T D F S T V R G M L E S I L A P L P G S V D E I I E			
UniRef90_C6PQX7	A A V E L F L N K K I G F L E G N I L E E C M N K F E S K E N Y V L E D I L E E			
UniRef90_R6E5W1	V L V A A F L E E K I G F F V D E E K T L A C I L D A H K T A Y N L D L E G I L E E			
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UniRef90_W8X3W1	V A V D G F L R G R I R R Y T Q P S I E R C L D A H G T Q T P S S L A E I L D			
UniRef90_A6CFE3	A A V E R F L S G E R F C D A T S C Q Q I L E S H Q F D P N P S L E E L F L			
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UniRef90_A0A037Z9T9	A A V E L F I N K R I D F F L T G N I L E E A M N K F S N I K N P S L E E I I Y			
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UniRef90_Q6AP35	I A V A A F L D G K I R F L D I A R L V T D T V D V V S P G D E N K L D D I L A			
UniRef90_T1DU65	V A V E A F L K E D L S F T R M S S L L E Y C M T K I S Y I T T P C L E D D I I D			
UniRef90_G5GFG1	Y A V E R F L N N K I R F N D S G I K I E A M R K H K K I L N P S L N D I I D			
UniRef90_UP100036B83AB	E A V D A F L R G N L A F T A M D T V S Q V V S E H S G S A P L T L D D V Y A			
UniRef90_UP10003138421	V L V D A F H A G Q I S F P G S R G I S A A L D A H A P Q D K L T A E L V L A			
UniRef90_UP10002EDC1B8	V A V H K F L N N E I S F L A E D M I E E A M K E H E V I E H P D L D T I L K			
UniRef90_UP1000361B2F9	I A V D A F L D H R L R F D R P E V I D A T L Q T L P I M N A G D L E Q V L E E			
UniRef90_UP10003623E39	V A V A A F L E G R F M G F M G P R T E E V L A T P A S H P S T L A E V V L E E			
UniRef90_W0EQU3	I A V A A F L N D A I D Y P S A R I V A E T M A H V E F I A S P G Y E E Y V H			
UniRef90_A1SLM1	V A V D A F R T G A L A F T E V P T V Q A V L S R H D V P S E V T I E D I L A S			
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UniRef90_UP1000380A625	V A V E A F L Q E G R I A F S E T T V V A A T L D A L E E P V D S L E R V L S			
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UniRef90_H3KHN6	I A V E A F L A K R I A F T T F S T V A G A L E S I P A C P K P A S V D D I L A			
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UniRef90_L1MTC7	T D A E V R K L V E A M I
UniRef90_F2NQJ5	A D R W A R E R A K E C
UniRef90_UPI0001C36E8C	A D S M A R E Y V R S V I G K
UniRef90_E8REC5	A D Q A A R A M V T R A L Q
UniRef90_K1LYW4	T D K M S R I T T Q L I K S
UniRef90_G2J9V3	V D A R A R R L A Q E V V S T L A
UniRef90_A1WX15	I D A Q A R R V A E E A V R R I A
UniRef90_UPI000348BAAE	A D T W A R A R A R E L L T S R
UniRef90_Q493C8	I D Q K A R E K A
UniRef90_R5P3V5	S E K E A Y E S V N M A L S K R
UniRef90_I3D6D3	V D K Q A R L M A K K V I
UniRef90_R7N5D0	A E A Q A H A Y I
UniRef90_B7KAT5	A D Q W A R R A N E V I E K
UniRef90_UPI000368EA8D	T D R N T R E M A R T I
UniRef90_E4S4E8	I D A E A R R R F K N L V E
UniRef90_Q1N1W8	A D Q K A R K W A Q E M I A
UniRef90_V4HRF0	A D S E A R R C A N E L V M R
UniRef90_F4ZZ27	Y D Q W A R Q Y A A S L
UniRef90_F9MNE7	A D E W G R H W A R Q V I D N R
UniRef90_D1C4K7	A D A W A R R E A E T L I A A T A
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UniRef90_B6DX92	C D L W A R Q H V K D S V A S
UniRef90_I3BYM6	Q D E E S R A R S L S W I K N
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UniRef90_W7Z8V1	V D Q E I R Q Q V
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UniRef90_E3B987	A E T W A R G A A H T L I E K
UniRef90_W5WQ29	A E R E A R S V A H E R M A Q W
UniRef90_K5Z150	I D A Q
UniRef90_E6UBJ3	A D R A A R E Y V S K R I I E R
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UniRef90_H1Q3G5	A D T W A R E Y A R K L V
UniRef90_K2KQW0	T D K M A R T A L E L I
UniRef90_Q5F5X0	V D K M A R E M T N Q I L R E R T A
UniRef90_R5X0Q7	T D A L V R I L T K E L I K
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UniRef90_UPI00036B61DB	V E N E T Y Q W E S
UniRef90_L7EMK4	F D T V T R H A R E L V A S
UniRef90_E1R048	A D A Q A R Q T E R A L L A H H A
UniRef90_J9FTP7	T D I R V R N Y I N R
UniRef90_L0K7Z0	V D A R A R D H A R N E L R G L
UniRef90_D5X3C7	S D K E A R V L A A E W V Q K I S
UniRef90_K1JM88	A D T W A R S E A Q K V
UniRef90_C6PQX7	L D V Q T R L Q A Q Q R V A Q L S
UniRef90_R6E5W1	L D R A V R A K T R E R R L A
UniRef90_D4MPL2	I D S K V K E Y V S S K V
UniRef90_W8X3W1	L D K E T R K L T R E I L
UniRef90_A6CFE3	A E Q E T Y D Y
UniRef90_UPI0003711B14	L D A R T R R R V A
UniRef90_A0A037Z9T9	L D D W A R K E I K Q W
UniRef90_L1PL35	A D R W A T G R A T E L
UniRef90_F4HDJ6	I D K R V K E Y V
UniRef90_K2QJR6	A Q E W A K A S A R S H
UniRef90_Q6AP35	V D K I A R E I A N D R I L S F
UniRef90_T1DU65	A D R E A R R K A T E V I A K R
UniRef90_G5GFG1	A D R E S R E I T R Q K I T E L
UniRef90_UPI00036B83AB	T D K E T R E L A Y S F L N C L P S
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UniRef90_UPI0002EDC1B8	A D T W A R I R A R E L L A
UniRef90_UPI000361B2F9	A D R E A R E F A K R W V A E Q A S
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UniRef90_Q7XYT1	A D Q R A R E V A S E W V A K
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UniRef90_D3PSW2	L D L E A R R W A R E Y L K
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UniRef90_B2UB12          UniRef90_A0A059KSB7   L D A M A R R H A T E L V A R L G
UniRef90_J0VTA9          A D R Q A R Q R A A D L M N
UniRef90_A3V5Q4          A D R L A R I Y A G E I T T Q I G
UniRef90_UPI00046CD585   A E R W A R T E A Q Q A L A A V G
UniRef90_UPI00047E5FD3   A E Q R A R A S A R
UniRef90_E4W5W9          A D A E A R R W V K E Q V E S
UniRef90_D5UD52          A E R W A R T R A H E V L A
UniRef90_UPI000375E20E   L D R S C R E R A Q A L V G A L
UniRef90_A7APZ2          A D S W G K N H V M E S M K N R
UniRef90_N0GLB8          I D G E
UniRef90_U1RC27          V E T W A R A R A H E L M
UniRef90_UPI0002379684   T D H L A R Q W V D E T V L E R A G
UniRef90_D5BR59          V D N E A R R R V A T V L V E K I K G
UniRef90_F0SLD5          L D D W A R K E T
UniRef90_F0YBB1          V D L W A R Q
UniRef90_K9RW48          A D Q W A R A T V R D K A K
UniRef90_R7CP39          A D K N A R I A S A S A I Q R F
UniRef90_Q5FPZ1          W D A R G R A L A E A H I L R Q S G
UniRef90_UPI00025578E6   M D Q I S S R R Y A E E S M A Q V
UniRef90_UPI0002EEFFBC   L D H R S R V A A R E V V A R L S
UniRef90_UPI0003F6E7C8   A D A A A R R R H V G A L V A
UniRef90_I0X7C6          T D T K A R S L A K E L L
UniRef90_B8EMN8          I D F A V R E R T R A R I L P G T A A
UniRef90_A7FFH3          I D R K A R D V A A Q V I A K L
UniRef90_C0EER5          A D R A A R E F V R S R V
UniRef90_UPI00036707C7   A E Q W A R D E A Q R L L S Q
UniRef90_W0TPJ7          A D A Q A R E T A E R R L L A
UniRef90_U2K4W6          L D A E V R Q Q C R Q W L G S R
UniRef90_C5BHC1          I D S A A R Q L A Q T L S A R F S
UniRef90_W6JTM4          UniRef90_S3L1Z1   L D T K A R K A A L A F V T D F S G
UniRef90_R5Q432          E N M R A R A L T A N Y A A S R
UniRef90_U3U2P9          I D R L A R I Y V H N L L T K L
UniRef90_R51UK9          A D R L A R I H T R E
UniRef90_R7FYE0          T D L R S R A V A A E I I S A R A
UniRef90_K4IMT0          V E H E A R Q R A D A L I
UniRef90_R7NL14          A D K S A R Q Y V L D S V K
UniRef90_UPI000478740E   V E K E T Y E K L I D S Y L Q R
UniRef90_U2DQD7          T D A Q A R A Y V R
UniRef90_UPI000465A03F   I D A E A R A F V T Q A I A N M T T
UniRef90_Q254F0          V D E E A R A L A Q E I I
UniRef90_B1XXI9          L D G R A R S L A G E L I R
UniRef90_B8GQ56          A D E A A R Q V A R E R I A G I G G

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1 10 20 30 40

The grid shows the first 40 amino acids of numerous UniRef90 entries. Position 1 is consistently yellow. Position 10 is yellow in most rows. Position 20 is yellow in several rows. Position 30 is yellow in many rows, often appearing in pairs or clusters. Position 40 is yellow in many rows, often appearing in pairs or clusters.

UniRef90_V7EPQ7
UniRef90_D2MNC9
UniRef90_F6ACE2
UniRef90_G2DTD9
UniRef90_Q8R622
UniRef90_K1DVB0
UniRef90_UPI000373BA84
UniRef90_L7FID3
UniRef90_R6IP12
UniRef90_S6WVF3
UniRef90_M5TDC2
UniRef90_T0XQK5
UniRef90_F2BV30
UniRef90_Q2GKQ8
UniRef90_D5UM21
UniRef90_D4YQ17
UniRef90_C0QYN4
UniRef90_F3LEZ4
UniRef90UPI0003B5841B
UniRef90_D4M8W1
UniRef90UPI000367E898
UniRef90_R7F4G0
UniRef90_K2GLN7
UniRef90_D5RP46
UniRef90UPI00047DA8BB
UniRef90_E8UB38
UniRef90_S2KHZ4
UniRef90UPI00029AD21B
UniRef90_A0A059DW71
UniRef90_D4JG88
UniRef90_S7XYI6
UniRef90UPI0003706069
UniRef90_U2Y3J6
UniRef90_R4LTR8
UniRef90_A4EMC0
UniRef90_F4QQM1
UniRef90_R5JF75
UniRef90UPI0004764D3C
UniRef90UPI0003708B36
UniRef90_Q65JJ3
UniRef90_N6WBR2
UniRef90_D4K3U5
UniRef90_B7RFT7
UniRef90_Q28PQ0
UniRef90_J3HMX9
UniRef90UPI0004782EE8
UniRef90_K2DSB7
UniRef90_C7N1S6
UniRef90UPI00036D7403
UniRef90_S0A8D2
UniRef90_H5TB70
UniRef90_D5EEM2
UniRef90_R6GZ10
UniRef90_O83610
UniRef90UPI00037A7D55
UniRef90_Q47F86
UniRef90UPI0003615E98
UniRef90_F8JTS4
UniRef90_F9Z5J9
UniRef90_C5CGN6
UniRef90UPI0003677B43
UniRef90_M4RBF8
UniRef90_D8DTH1
UniRef90_Q1LSV3
UniRef90_W7F698
UniRef90_W1SM99
UniRef90UPI000463F3E6
UniRef90UPI0004747468
UniRef90_F8N6M3
UniRef90_Q2W4C9
UniRef90_F6EIX8
UniRef90_D1NSQ0
UniRef90_G9RXT0
UniRef90_A0A059F8U3
UniRef90_A5K384
UniRef90_R6ZX4E
UniRef90_C7R5Z2
UniRef90_R6SUW2
UniRef90_B9KIT5
UniRef90_E1SU20
UniRef90_A4SYU5
UniRef90_E6W971
UniRef90_H7EMB0
UniRef90UPI0002375491
UniRef90_E0RTM1
UniRef90UPI00036C054A
UniRef90_W4HLL5
UniRef90_R7K7U5
UniRef90UPI0004689422
UniRef90_L0B469
UniRef90_F3WVN3
UniRef90UPI000379BC71

	50	60	70	80
UniRef90_V7EPQ7	I A L D H F M E G R I G F [L] D M A A V V E D T L A V L S G K A V S D L E E V L A			
UniRef90_D2MNQ9	V A N L A F R E G K L S F [L] D E N C I Q D C L N Y F P F E T I I S T K E E E V F H			
UniRef90_F6ACE2	V A V A A F L E R R I R F T D A R I I G V L E A E P S V A V D C L D A V L E			
UniRef90_G2DTD9	E A V A A F L A G K A R F T D A R I V A H C L A Q D F S D G L K D I E S L L A			
UniRef90_Q8R622	I A V E L F M K K Q I K F [L] D Y R I I E E A M N S H Q V L T N T L N V I K E			
UniRef90_K1DVB0	V G V D A F H D G A A R F T D V D T I A E V L V Q R H D D A D A H T V E G V L A			
UniRef90_UPI000373BA84	Q A V D A F H E G R L S F [L] G V D T V A R V V D A H E A P D A L T R E A L A D E			
UniRef90_L7FID3	E C V E A F R A G G L P F N G M E T V T R V V E E H G I P T S L T V A D V L L E			
UniRef90_R6IP12	E S V R L F L N G K I K F T D A V L N R A A M E A C P Q V A D Y T L D D V L Q			
UniRef90_S6WHF3	V A V A A F L D G R I R Y L E A G I I E E V L N H E P A T A V E G L D A V F A			
UniRef90_M5TDC2	T A V P L F L S G K I R F T D A R L C K Q T L Q D H N H E S A P S L A R L L E			
UniRef90_T0XQJ5	V A V Q A F L E G R I P F T G F E I W E R V L S E A P G T V P D S L E D I R R			
UniRef90_F2BV30	E A I K A F I D G K I N F [L] Q F D V V E S V L N K W D T K I M N S F E D V L I			
UniRef90_Q2GKQ8	V A V E S F L N S E I T F F L E V N I V L H V M N K V P Y G K V S S L A D I M E			
UniRef90_D5UM21	V V A Q A F L D G R I T S F [L] A V D T V A Q V S A Q W Q A E P R D V A D V L A			
UniRef90_D4YQ17	V F V D A F H D G H I F T T A I S D G L A A A L D K A D Q L N V E T L E Q V L E			
UniRef90_C0QYN4	I C V Y S F L Q K Q K I G F T D F D I V S K V C D R K I N V P L T I D N I I N A			
UniRef90_F3LEZ4	I A V D A F L Q H Q V S F G Q M T D S L Q W V M E H A S W Q E P A D L D A V V A			
UniRef90_UPI0003B5841B	V A V A A F L E R R I P F T G I A A I I E R T L E T I P V I S T V Q D L D G V L A			
UniRef90_D4M8W1	V A V D R F L K G Q I G F T D I A A V V E E T L E S C P L P A P G S L E E A L F			
UniRef90_UPI000367E898	V A V Q A F V G G G T L K F T E V Q T V S A V V D S L R G S A L R D L A D V S A			
UniRef90_R7F4G0	I A V Q A F I D K R I S F T A M A N V T R Y A L D H A D I C D R P D Y A A I I D			
UniRef90_K2GLN7	A A L D A F I A R R I L G F S D M A R V V V E A A M D A L S G S A V P D L E N V R R			
UniRef90_D5RP46	V A V G L F L E R R I L G F L D I A A V V E E T L E S C P L P A P G S L E E A L F			
UniRef90_UPI00047DA8BB	Q A V H A F L D H R R L P Y L A I V D T V S E V L N E M D G P Q F A S V A D M V E			
UniRef90_E8UB38	I A V D A F L D G H I G F L D P R V I E R V L D E T P G G P L S W D A I E V I L			
UniRef90_S2KHZ4	V A V E A F L T G D L L A F T G A E V V K R V L L D A S S L Q A A T E L E D V L E			
UniRef90_UPI00029AD21B	E C V E A F L A G R I P F T G M D T V T E V V A E H G A P A P G T V E E D V L E			
UniRef90_A0A059DW71	V A V S A F I A G Q C G F L D S W L V E Q A L S R Y Q G I A C E T L E E E I A F			
UniRef90_D4JG88	Q A V E L F L E K K I S F L S E E A I Q Y A I N T V E Y I P T P S L E E Q L E N			
UniRef90_S7XIY6	Q A V L A F H A G V I G Y L D I L D V I E E V V Q R H E P T D L S L D A L H D			
UniRef90_UPI0003706069	V A V A R F L K G E I P F L R E E I I E R I V S Q H Q P V S Q P D L E A I E W			
UniRef90_U2Y3J6	I A V A A F L A G Q I G F M R I A A N V E R V L L A A T M P Q A P S S L D D V F A			
UniRef90_R4LTR8	E C V A A F M A G R L P F L G V D T V S A V L A A A D F G E P S T V E A V L A			
UniRef90_A4EMC0	R A L D G F I A G D I G F L D M S R V V V S R T L D K M S S Q A Q I T L D T V L E			
UniRef90_F4QQM1	I C V Q A F L D R R I G F F L Q A D Y V E T A M M R A Q L P T S S K D H I L E			
UniRef90_R5JF75	K A V A L F L Q E K K I G F F L D Y T L I R E S M D N C V N M E N P Q L G D I F D			
UniRef90_UPI0004764D3C	V A V D A F L A R R I S F M A A Q T V D A V L N A L P N R R A T S L D D V M			
UniRef90_UPI0003708B36	V A V E N F L N D K I T F N K Y D V I Y R T F D A I P L S K D I D I E A I H E			
UniRef90_Q65JJ3	E A V A A F L S G R I S F L G E D I I E K A L E R H Q V I A K P S L Q E I I R E			
UniRef90_N6WBR2	V L V D A F I S G R I P W L G V D V L R D V V V G A H E G I A D P L E D I I O			
UniRef90_D4K3U5	E A V K L F L E D K I I G F L D G R L L V E A V V D S D F S G G G Y S L A D V Y E			
UniRef90_B7RFT7	V A L D G F I D G H I R F P Q M A Q V V V E D T L E Q L N S D N N V T L D D N V A			
UniRef90_Q28PJ0	I A L D G F I A G K I G F M D M S G I V S D T L D A M S S K A P E T L E D V L L Q			
UniRef90_J3HMX9	V A V Q A F L D R R I I G F R M D Q L N Q R V M D A L P N Q A A T D I D T L L Q			
UniRef90_UPI0004782EE8	I A V A A F L A G E I I G F L D I A T I V S L V L A G Y S P A E P Q C L Q D V L A			
UniRef90_K2DSB7	V L V E R F M N Q K I S W M E G T K L E Q L I S S H Q P L N L L T L E A I I L E			
UniRef90_C7N1S6	V A V A A F L L A D R C G Y L D D A C V E H A M D A H E V Q A V E S L D Q L A E W			
UniRef90_UPI00036D7403	V A N E A F L R Q R R I I G F F M A V A L V E Q T L A A M P S T P V A V S L D D I V W Q			
UniRef90_S0A8D2	Q A V H A F L D G R I L A Y L D V P S V A E T I E Q M D A Q A N P S V A E V E E			
UniRef90_H5TB70	V A V D A F L Q G K I V N F S Q N T V N D M T L Q K Q N T S S L T C I D S I I E			
UniRef90_D5EM2	V A V D A F L R R E I S F T Q S L V I E Q V L S S Y N D N A P Q T L E E S L I			
UniRef90_R6GZ10	V A V G L Y L D Q V G F Y D Y D L V K Q A L D R P F V K K P D L G Q I L A			
UniRef90_O83610	E A V R A F L Q R N I I G F F L D A H V T A Q A L Q E D W R A I P Q T F E E V M A			
UniRef90_UPI00037A7D55	E C V D G F L T G K I P F F L G M D T V S Q V V A E H G T D D P G T V A D V L E			
UniRef90_Q47F86	V A V A A F L D G H I P F F L G A L L I N E A V L Q A M P A G P E G S L A D V L L A			
UniRef90_UPI0003615E98	L A V A A F L A G R I G F F L D H G V T E A V V E A P A G E A T T L D E V L L D			
UniRef90_F8JTS4	E C V D A F L A G R I P F T G V D T V A E V V E Q V K P G T P D T L A D V L L D			
UniRef90_F9Z5J9	V A V A A F L Q G R I S F T G M S D L I E K T M Q Q V D F L K P T L E D Y M E			
UniRef90_C5CGN6	I A V K N F V E G R I I S F G S Y R I I E K T I E R I E P I S P K D F E E E V Q A E			
UniRef90_UPI0003677B43	I A V Q S F L K E Q I T F D K I Y E V I Y R T F D T V P L S K N I D L E T I Y E			
UniRef90_M4RBF8	Q A V H A F L D G R I P Y L G V D T V K A V I D Q M D A E L R A S V E E M G Q			
UniRef90_D8DTH1	I A N A A F R R N E C S F L D A D I I E T T M A K T T F N N N P D L D V Y L L Q			
UniRef90_Q1LSV3	V A V A A F L Q R K I I R F T D A S V N Q M V L D K I N L E E P S S I E E V L C			
UniRef90_W7F698	I A N L N F L N N K I K Y F D S S I I S Q V L E S F N S Q V S E M K Q I L Q			
UniRef90_W1SM99	A A V A A F L E G K I I G F F L D E D L I E K A L S N H Q T I A H P S L A V I Q E			
UniRef90_UPI000463F3E6	V A V A A F L E R R I I P F P A A R C V E A V I D A Q K P V E A K D L E V L Q R			
UniRef90UPI0004747468	V A V A A F L A G R I I G F F L E I A A I S A D T L T R Y D P A A P D T L D A V L A			
UniRef90_F8N6M3	V A N A A F R R G A C S F L G M A D I I E T M R Q A T Y D K T P D L D T Y F K			
UniRef90_Q2W4C9	V A V A A F L G R R I I G F F L D A S L V E R T V A G V S H C E L T C I D D V L A			
UniRef90_F6EIX8	E A A A A F L Q R D L P F P R V R I V E H V L D H E W S S A P S T V I D D V L A			
UniRef90_D1NSQ0	Q A V H A F L D H R L P P Y L G V D T V R D V L D E M D G E L R S S S V E Q M V E			
UniRef90_G9RXT0	E A V R L F E G R I I P F F L K G E L V E G V V D S E A F G G P Y T L D D V Y A			
UniRef90_A0A059F8U3	A A V S A F I A G Q C G F L D S W V V K E V L S R F A G L A C S S L E E I I G L			
UniRef90_A5K384	V A N K L F L S N K I G Y F D A A I I S D V L E S F T P Q E V N N C E E D L M H			
UniRef90_R6ZXEE4	Y A V A K F L N H E I I S F T D Y R W I E Y A M E H H S V I Q N P A L E E I I L K			
UniRef90_C7R5Z2	V A V A A F L D E K I F D Q A S V I Q T L T E Y A G V V D L K S V L A			
UniRef90_R6SUW2	A A V A A F L Q G R I I R I Y D P E V I S K C M S G A E F V A T P T L D D V L A			
UniRef90_B9KIT5	V A V E A F L N F E I I A F L D P N I I M S A M D K L A C C E V N S I L S E A G E			
UniRef90_E1SU20	V A V A A F L D G R I I R F S D A R V N G Y C L E Q Q A E L A P L G T L E E G L A Q			
UniRef90_A4SYU5	V A V A A F L D A G L P Y L Q P Q V V E K T L D A I A V T N A D S L E T I L A			
UniRef90_E6W971	V A V A A F L Q H Q I I R F T D A V L N S E V L A S L S C S E P A S V E A V M E			
UniRef90_H7EMB0	V A A G A F L E G K I I G F G R P E I V G A T L D A E W A G D V R D L K D V F E			
UniRef90UPI0002375491	V A V G A F L S G R I I R F D H I H A V N L A T L D A V L P S K P D S L E A L L D			
UniRef90_E0RTM1	E A V R A F L E G R I I S F P R I A Q V V V E S V L A R E W P S P Q G G I S P I L A			
UniRef90UPI00036C054A	V A V A A F L R G R I I H F L D I Y D I I E Q T M S A R P A Q V T A L D D L F E A			
UniRef90_W4HLL5	R A L D A F I D R R I I G F F L Q M T E V V E A T L D S I G S H A A I H L D K V L E			
UniRef90_R7K7U5	V L V Q K Y L I N D E I I G F Y D I S D S L E R V L L K F G E C Q I E T L D D V F A			
UniRef90UPI0004689422	T A L D G F I A G T I I N F V Q M A E V V E Q A M A H M S A S D G H T L D N V L E			
UniRef90_L0B469	V A V E G F L S G R I I K Y T W I P R V I E A S F E W Y L S K K L L S L D E I I I N A			
UniRef90_F3WVN3	V A V A A F L A R R I I G F F L I A A I V E D V L H R Y D P A P P E T L D A V I A			
UniRef90UPI000379BC71	E C V D A F L A G G L P F T G I V D T V A R V V E E A F A G T S L T L P D V L E			

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UniRef90_V7EPQ7
 UniRef90_D2MNQ9
 UniRef90_F6ACE2
 UniRef90_G2DTD9
 UniRef90_Q8R622
 UniRef90_K1DVB0
 UniRef90_UPI000373BA84
 UniRef90_L7FID3
 UniRef90_R6IP12
 UniRef90_S6WHF3
 UniRef90_M5TDC2
 UniRef90_T0XQJ5
 UniRef90_F2BV30
 UniRef90_Q2GKQ8
 UniRef90_D5UM21
 UniRef90_D4YQ17
 UniRef90_C0QYN4
 UniRef90_F3LEZ4
 UniRef90_UPI0003B5841B
 UniRef90_D4M8W1
 UniRef90_UPI000367E898
 UniRef90_R7F4G0
 UniRef90_K2GLN7
 UniRef90_D5RP46
 UniRef90_UPI00047DA8BB
 UniRef90_E8UB38
 UniRef90_S2KHZ4
 UniRef90_UPI00029AD21B
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 UniRef90_D4JG88
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 UniRef90_R4LTR8
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 UniRef90_Q28PJ0
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 UniRef90_K2DSB7
 UniRef90_C7N1S6
 UniRef90_UPI00036D7403
 UniRef90_S0A8D2
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 UniRef90_D5EEM2
 UniRef90_R6GZ10
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I	A V A A F L A G R I P F T A	T E T I A G V L M D Y P D E E P H E L A D V M A		
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V	C V E A F L K G A L S F L A	V D T V E R V V S E H D A G A A S T V E E V L L H		
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E	A V K A F I A D K I S F T D L	F T V T E E M V V T H T P T P L R D W Q D I V M		
E	A V A G F F P A G D L P F L G	V G T I Q D V L A P R V E P A D G V D A L L D		
V	V V A A F L A E Q I G Y L D I	A R C V E A T M D A H E V Q V V E S L E Q L K A		
V	V A V Q A F L E Q R I R F T A I	A A V V V R H T L E Q V V S T H A V A S		
T	A I L D G F I A G H L K F T Q M	S D V V E Q T L E Q Q M D T H A T M T L D N V L K		
V	L V D A F C D H R I G F L Q	T D L I S R C L A E H V P D T E L T L E A V L		
T	A V A D A F L Q G R M R F T D I	H R V N A D T L N D V N L N A V R N L D D D L L E		
E	A V A A F L A G K L D F M G I	P A V V E Q A L E R Q A A P V C G D V D A V M M E		
V	V A V E K F L E G K I L F G E I	P R Y I E R S L E R F S M I P A S I E E L F A		
E	A V A A F L A G K L P F P G I	A E T V A A V L D R H R P R P V T G L D D D V L L E		
E	A V A A F L D H R L P F V R I	V D V V A E V V T A H T V V R R P S L D E V L L D		
I	A G Q A F L D G R I G F L D I	A R H I E T A L N K G G T K F K A G L D D D I V R		
V	A V L D G F I A G Q L R F T Q M A E I	V E E V L D A R A G S D D D M T L D L V G K		
T	A V E L F L R G H C A F A D I P R L I G A A L E A H E A T A P A D T D P L A			
A	V A V A A F L R G E I G F Y G I	A E L V E R A C E H F A P E A P A D V D E A L A		
A	A A L D A F I A G Q I G F L D M A A V V E A T L E G M D S I P P Q S L D C V A N			
Y	A V A R F L K K D I L A F F Q I Y D M I E Y A M S K H R V I K H P D L S Q I L E			
E	A A L D N F I D Y K L S F T G M A D V V R A T M D E L E L K N E L V I E E I M E			
E	A V A D A F F D G R I D F L G I T G L I R A V L E R P R A E R A D G V E A L L L E			
V	A V A D A F I D G R I K F T R M A G V V E D V L T R V S S Q P G L D L D M V V E A			
E	A A A A A F L A G R I R F P Q	V D V V S E I I L Q G A S Q F A S S D V D D I L L A		
V	C V D A F R N G R L P F L G	V D T V A R I V T E H D V P E E L S I D D V L		
Q	A V E A F F C G K I K F T D L A A V V E E S L L A L Q G N P A I P D L S A V L			
V	A V E L F L G R R L G F L D I	A A V V E E S L L A L Q G N P A I P D L S A V L		
V	A V A A F L D E R I I S F T G M K L V E M T T E R F S A P A P Q S V E E I F A			
V	A V E L F L W Q R I K F I D A H L V Q A L E Q			
T	A L D G F I A K Q K I G F L E M S I I V E K T I A E I C H L K N M C L S N I L D			
V	A V A G F L E G R L P Y T W	A R V I E A A L E W Q A G R P S V T L D D V L D		
I	A V E S F L K K M I S F T D I	P N I I D H I L N I L H N E P N A I L D D V L Y		
V	A V D A F L Q E A I P F T H	W Q V I A R V I D L Y D G G E G S D L K D E L Q		
V	A V A A F L K Q Q I G F T Q I	P Q V W D Y A L Q N V Q N A K A E N I D I I L H		
V	V A V D E F L R G N I I A F K D I F E I L E V S L Y K F R D R L P E D I F E			
V	V A V H A F L N K Q C S Y A K M V S C Y V L K T M D N D W D L H V S N F A E T V E			
V	V A V R A F L D R R I K F L Q I P E I V E E V L E V V D F G P L R D L E A V E A E			
I	A V K N F L E D K I S F N Q I Y D V I Y R T F E A T P M S N L T D I E S I Y E			
V	A V E A F L Q G R L G F M A I A G L V E Q A C E R F G G A V V G S L D D L M A			
R	A L D H F I A G R I R F T D M N M V V E E V L V N A L G H A P E A T L D V V A H			
V	A V A A F L A E E G S Y L G I A A C V E A V M D A H E V Q R V E S L D Q L E E			
E	A A A A A F L D G R I P F P A	V R T I A E V L A A A D A A E P A T V D E V L E		
V	V A E A F L A G R I R F T D W P R V I T A A L E W Q Q R Q S S V T L D			
I	A V K L F L E R K I K Y T D Y K I V K N S V D Y F E N I V L N D F E D I I N			
I	Y V N K F L N N E C K F L D I K K I I F E S L D K F A S F K P L N L D E I I F E			
V	C V E A F L S G L I G F F L D I T D N I A K V L H E H H A K P E L S V Q D V L			
K	A L D A F L A R Q I G F F L Q M S E V V K S V I D T H G F E D A L N L E H I L G			
V	V A V A A F L G D K I G F F L A I A E I V E D M M D K I G K E Y L V D L D Q V F A			
R	A L D A F I E K R I G F T R M A A V V E E T L N R V S G E A G I T L D N V R Q			
R	A L D H F I A G R I G F F L A M S A I V E E V L T R L S A D A E T L L D T V M H			
V	V A V A A F L A G R I P F Q I V D T V T R V V E S M W T P E P A T L D E V L A			
R	A L D A F I D K R I S F T R M T D V V E E T L N R V S A Q A G M S L D N V R H			
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V	V A V A A F L E Q G Q L A F D R I P L L V E A V M Q A R P P Q V V D G L E V I L S			
M	A N E L F R Q N L I N Y D Q L H E L V H D A V E L F N P L E L K D I L E D I L L			
V	V A V A F L L A G E I G F L D I A R S V E T V L E R V G S M P L A T L E D I L L			
V	I H V E A F L N G Q I K F T E A Q F N Q Q I L E R Y Q P S R V F D I E S I L Q			
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V	A V E A F F H S G H G F F L D V D T V E R V V D D W A A A V R T V E D V L			
E	C V E A F F H S G H G F F L D V D T V E R V V D D W A A A V R T V E D V L			
E	L V A A F L N K K I K Y L E I E V N K K V T K E L N F E N P K N I E E E V F E			
V	V A V A A F L N Q D I G F M T A D I N R K V T E Q L G T T R A V I L E D I L A			
V	V A V A A F L A G K L D Y L G P W V V E T V M D V H E V S S V E S F T Q L Q E			
I	A V E Y F L E E K L S Y F D T Q I V L K I F N S T D E I T Y N N Y E Q M F E			
I	A V N A F L N K Q I N I T D P I I V E N K K V T K E L N F E N P K N I E E E V F E			
E	A V D A F L G G R I A F P A V D T V A R V V Q R A D E T S A L T P E D V			
V	V A V A A F L A E Q I R F T D V R L I N E K C L A H F L N Y A A R S L D D I V A			
A	A V E A F L C H T I P F G E V T T I Q K T L D Y F H Q T L P N S L N E V F A			
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V	V A V A A F L A G K L D Y L G P W V V E T V M D V H E V S S V E S F T Q L Q E			
V	V A V A A F L Q G R I G Y S D V R L I E R A L E R A D F L P S P T V E E D Y T A			
I	I A V Q A F L D R R I S F S G A R H V A A C C E T A Y A Q A P E S V E E A L G			
E	E A A A A F L A G R V S F G A V E T I A D V L H A A D S E T P A N V D D V L L D			
V	A V S V L F L Q N K I P Y L K M F D L V K K A L D E Q E P I L D P D L E T I I L Q			
A	E A A A E F L A G R L Q F P H V D V V E A V L D K A A A G T P R D F D D V M A			
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90

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UniRef90_UPI00047EDF13	S W D F E P L D A Q T F P P A V D L A R S A V A A S A T H P A V L N A A N E
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Sample	B Cell Count
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lupas_14	9
lupas_28	8
jnet	6
conf	6
sol25	7
sol5	7
sol0	7
jhmm	4
jpssm	2

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm

90

UniRef90_UP10003660AEB WD
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