





QUERY E G H R L G K R  
UniRef90\_G8P0D0 E A A E V T S Q  
UniRef90\_C9AAAY6 E G I P F K E  
UniRef90\_UPI0003B5F2BE E  
UniRef90\_F3ZYB3 E  
UniRef90\_UPI000378B076 E R R E  
UniRef90\_Q47T13 E Q R R A H Q  
UniRef90\_I0WJ70 E N P P F Q Q  
UniRef90\_F2JZY7 E G I A L  
UniRef90\_E6RR48 E A  
UniRef90\_N9U560 E G I  
UniRef90\_E7GPT9 E K  
UniRef90\_UPI00047B7252 E A  
UniRef90\_UPI0003B317A1 E G A  
UniRef90\_R7CJ4 E G V E V S  
UniRef90\_H0A7Q7 E G A R  
UniRef90\_R9MYL8 E  
UniRef90\_D4INT7 E K R R  
UniRef90\_B0K4A3 E G V E V  
UniRef90\_K1SLW5 E R K N S G E K  
UniRef90\_UPI0004763375 E R R N  
UniRef90\_C3KB65 E  
UniRef90\_P52982 E K H Q V  
UniRef90\_UPI0003606BD9 E A  
UniRef90\_R5ZEW0 E K S K  
UniRef90\_F4DNN1 E G V  
UniRef90\_C4GKE9 E R G E L  
UniRef90\_UPI000428E5D9 E G V E V  
UniRef90\_UPI0004745767 E K N K  
UniRef90\_Q82LS7 E  
UniRef90\_K0V8U2 E  
UniRef90\_R6Y460 E  
UniRef90\_B4UFZ8 E R A A L D  
UniRef90\_UPI0003686C32 E G A N F  
UniRef90\_V5E7W9 E G  
UniRef90\_C1B0U6 E A E R A G L R  
UniRef90\_J2WUE8 E G A R  
UniRef90\_F7L4R0 E G V  
UniRef90\_UPI000382D76A E K  
UniRef90\_NOCD76 E G V Q L D R  
UniRef90\_UPI00041609C4 E G A  
UniRef90\_R0E9A3 E G A  
UniRef90\_G1UUZ9 E G  
UniRef90\_W0RDE2 E G A L L  
UniRef90\_UPI0004218F63 E  
UniRef90\_UPI000364525F E  
UniRef90\_K9PZ16 E K K H L N  
UniRef90\_F0T7Z7 E E V D M S  
UniRef90\_R5QUK7 E  
UniRef90\_F5L4R7 E Q A P L N  
UniRef90\_F3LGS6 E R K E F  
UniRef90\_A1K7V4 E R A  
UniRef90\_UPI00046FC833 E G V K K R  
UniRef90\_J7KZ25 E G V R  
UniRef90\_T0J363 E K  
UniRef90\_D4KHY0 E K S H  
UniRef90\_K8WYJ7 E A  
UniRef90\_UPI000371FF91 E  
UniRef90\_B2T7R1 E A Q H A G D  
UniRef90\_UPI0003674ADC E Q S I A S K  
UniRef90\_N2BH85 E G V K I  
UniRef90\_M7NAY4 E  
UniRef90\_A6ELH5 E  
UniRef90\_G5IDC9 E G V D I S K  
UniRef90\_I8T8J5 E  
UniRef90\_R5JQD1 E K Q H  
UniRef90\_S7V771 E K A Y L K G Q  
UniRef90\_R6W4Y8 E K V D M S  
UniRef90\_UPI0003692C2B E A  
UniRef90\_I0KQV1 E K V  
UniRef90\_V9H DU1 E  
UniRef90\_F4GSX8 E A  
UniRef90\_A0A031GHF2 E G I T L S  
UniRef90\_W9AG27 E K R I M N K  
UniRef90\_UPI00047A16BC E G A L L A  
UniRef90\_F4LLT7 E A  
UniRef90\_W1N3H1 E A Q E V  
UniRef90\_W1J4W1 E A  
UniRef90\_E7NYK6 E K  
UniRef90\_R9WGF8 E N I K L  
UniRef90\_K0CKT6 E  
UniRef90\_F3L921 E  
UniRef90\_W7YPZ6 E G V R  
UniRef90\_UPI000365EF8B E G A  
UniRef90\_U1K429 E G V S F K K  
UniRef90\_R5NV86 E R I Y L G  
UniRef90\_I3ZKR1 E R A  
UniRef90\_UPI0003803BF3 E N L D V  
UniRef90\_S9U7Z9 E G M Q A N E  
UniRef90\_E1UUJ8 E G R N I E  
UniRef90\_UPI000361E9E5 E A  
UniRef90\_F3B8D8 E N C N I S

|                        | 1     | 10            | 20                | 30  | 40      |
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| UniRef90_UPI0002896C79 |       | F Q Q Q V     | W Q A L L Q I     | P Y G R T W T Y G E Q A Q Y L E N P K A I R A V                           | V A G G |
| UniRef90_I7A6I4        |       | F Q Q R V     | W N E L L K E     | P Y G K T T Y Y G K L S R E L G N E R S I R A V                           | V A G G |
| UniRef90_R75SQ1        | S P   | F R Q Q R     | W Q L L L R R     | P Y G G Q T T T Y Y G A L A A R M L G G V N H M S A S R A V               | V A G G |
| UniRef90_A3WAQ0        |       | F Q Q A R     | W E A L L R R E I | P A G G E T T R S Y G E Q Q A A A M L G G N P K A S A S R A V             | V A G G |
| UniRef90_C4K8D1        |       | F Q Q L S V   | W Q A L L R R D I | P F G G E T T L V S Y R S M L A A A R K I I H R N P P D A V R A V         | V A G G |
| UniRef90_UPI000463DCCE |       | F Q Q R R V   | W Q A L L R R T I | P S W G K T T I S Y S E L L A A A K I I G G M P P K A T A Y R A V         | V A G G |
| UniRef90_K9WYP5        |       | F Q Q Q V     | W E I L L R T I   | P Y G Q T T V T Y G A I A A R R I E I C R M S A Q R A V                   | V A G G |
| UniRef90_G5H330        |       | F Q Q K V     | W H A L L A I     | P F G G E T T R S Y R E L A A R Q E G G H P P K A V I R A V               | V A G G |
| UniRef90_A0A014PRJ0    |       | F Q Q K V     | W K E L L M E I   | P I G G E T T R S Y L E L S A R Q L L A A R A H I I V G G N E K A S R A V | V A G G |
| UniRef90_UPI00041207ED |       | F Q Q K M V   | W K A L L S E I   | P Y G T T T Y Y K D I A L K I G G N E K A S R A V                         | V A G G |
| UniRef90_G7M7W0        |       | F Q Q Q R V   | W Q A L L R E I   | P V G G E T T R S Y R A Q L A A R A H I I V G G R P P E A F H P V A       | V A G G |
| UniRef90_G9ZA93        |       | F Q Q Q V     | W R A L L R R I   | P Y G G E T T R S Y S Q A L A A E A V G S P P R A V I R A V               | V A G G |
| UniRef90_I4WBE6        |       | F Q Q Q R V   | W K E L L R N I   | P Y N K T K S Y L E Q Q A K S V G G R D I K A V I R A V                   | V A G G |
| UniRef90_W4NRG9        |       | F Q Q Q R V   | W H A L L R Q I   | P Y G Q T T R T Y A Q A A R A Q S V I G G R P K A V I R A V               | V A G G |
| UniRef90_UPI0004675941 | T P   | F Q Q S V     | W R A L L Q D I   | P Y G E T T K S Y G E V L A A Q S I V G G R N P K A A R A V               | V A G G |
| UniRef90_UPI00041620B4 |       | F Q Q Q A V   | W R A L L A Q I   | P Y G Q T T Y Y K E L A A A S V L V G G R P K A G V R A V                 | V A G G |
| UniRef90_D9SQZ9        |       | F Q Q L Q V   | W R A L L K I     | P F G S L A T Y Q T I I A N A I D R P P T A T R A V                       | V A G G |
| UniRef90_W1Q5N1        |       | F Q Q Q S V   | W K L L R E I     | P Y G Q T T T Y G E I A T Q L G G S P P A M R A V                         | V A G G |
| UniRef90_D4MZ40        | T P   | F Q Q Q R V   | W Q A L L R A I   | P A G K T L S Y A Q L A A E A I I Q R P L A V R A V                       | V A G G |
| UniRef90_UPI0003465081 | T P   | F Q Q E E V   | W E A L L T R I   | P Y G K T A S Y S D I A E I I Q R P L A V R A V                           | V A G G |
| UniRef90_M4XLD7        | T P   | F Q Q K A V   | W E L L K Q V     | P Y G A T I T Y G E V L A A A A A R S A Q R A V                           | V A G G |
| UniRef90_V4NZI5        | T P   | F Q Q K V     | W Q A L L L S I   | P A G K P I S Y A A L L A A Q Q M G R N P P K A V R A V                   | V A G G |
| UniRef90_UPI00047EACD6 |       | F Q Q Q V     | W Q A L L L A I   | P F G G E T T R T Y G Q L L A A Q Q L G K P S A S R A V                   | V A G G |
| UniRef90_Q3A072        | S P   | F T Q A V     | W R E L L Q A I   | P M G Q T T R S Y S K E Q L A A Q R M G R N P K A V R A V                 | V A G G |
| UniRef90_UPI000412B473 |       | F Q Q K Q A   | W D V L L A I     | P Y G E T T R S Y K E Q L A A R R L G V P K S I R A V                     | V A G G |
| UniRef90_V4PGZ2        | T P   | F Q Q R R V   | W Q A L L R D I   | P A G D T V S Y S E L A A R R L G V P K S I R A V                         | V A G G |
| UniRef90_UPI0003B4BF53 | S P   | F Q Q Q R V   | W E A L L L A I   | P C G G E T T A S Y G E L L A A Q I L G L P P H A R A L G G               | V A G G |
| UniRef90_E8SN62        | S P   | F F Q Q A     | W D V L L A I     | P A G S T R S Y A S L L A A Q I I G R P P A A V R A L G G                 | V A G G |
| UniRef90_UPI0003713D2D | T P   | F Q Q R R V   | W Q A L L R D I   | P A G D T V S Y S E L A A R R L G V P K S I R A V                         | V A G G |
| UniRef90_F8GMH7        | S P   | F Q Q Q R V   | W E A L L L A I   | P C G G E T T A S Y G E L L A A Q I L G L P P H A R A L G G               | V A G G |
| UniRef90_UPI0003955031 | D F   | F Q Q R Q     | W T A L L R A I   | P F G G E T T R T Y G E I A A R E I L G D I K A V R A V                   | V A G G |
| UniRef90_C6Y210        | T P   | F Q Q K K V   | W E A L L L N I   | P F G G E T T R T Y G E I A A R E I L G D I K A V R A V                   | V A G G |
| UniRef90_R6P7G7        |       | F R Q A V     | W Q L L C E I     | P Y G K L T T Y G E L A A K K I R S T M S A Q R A V                       | V A G G |
| UniRef90_C9QEP6        |       | F Q Q M Q V   | W Q A L L T S I   | P H G Q T W S Y Q D L L A N A I L G N P K A V R A V                       | V A G G |
| UniRef90_H1H8T6        |       | F Q Q Q V     | W N G L L H I     | P Y G E T T K S Y K E Q L S E Y L Q Q I P K S I R A V                     | V A G G |
| UniRef90_UPI000371A3D3 |       | F Q Q Q S V   | W R A L L L E I   | P A G Q S C S Y G D L L A R A Q I L G R K P P R A V R A V                 | V A G G |
| UniRef90_Q2RIS2        | T P   | F Q Q R S V   | W A A L L L E I   | P Y G T T Q S Y S D L L A R A Q I L G R K P P R A V R A V                 | V A G G |
| UniRef90_UPI0002E2B3A1 |       | F Q H T V     | W D A L L C D I   | P Y G R T L S Y G Q L A A E R I L G R P G A A R A V                       | V A G G |
| UniRef90_U7P3M9        |       | F Q Q R R V   | W E A L L A G I   | P F G G E T T R N Y A E I A A E Q L L A A R A Q I L G R K P P R A V R A V | V A G G |
| UniRef90_UPI0003B4F3FD |       | F Q Q K V     | W K Q L L M K I   | P F G K T V S Y K D I A L S V V G N K N A Q R A V                         | V A G G |
| UniRef90_N9WER7        |       | F Q Q E A V   | W R E L L R K I   | P A G E T T R S Y A D I A A A A V G K P K A V R A V                       | V A G G |
| UniRef90_G2FWI5        |       | F Q Q L Q V   | W E E L L S I     | P Y G E T T R S Y S R L A A T K V I L K G Q R A V                         | V A G G |
| UniRef90_H8MKL5        | T P   | F Q Q R E V   | W R A L L R E I   | P V G T T T Y Y S R L A A E R I V G G R P K A V I R A V                   | V A G G |
| UniRef90_UPI00047576C1 |       | F Q Q L A V   | W Q A L L C S I   | P Y G E T T K S Y A D I A H S I V S K P K A V R A V                       | V A G G |
| UniRef90_Q6FEA2        | T P   | F Q Q R Q V   | W T A L L Q T I   | P Y G K T C S Y S K D I A A Q M V I G G R P K A V R A V                   | V A G G |
| UniRef90_D3EL70        |       | F Q Q M A V   | W D A L L Q Q I   | P Y G Q T F T Y S D I A H Q I L G G K P A A M R A V                       | V A G G |
| UniRef90_UPI00047DE3C5 | T P   | F Q Q S V     | W N A L L N E I   | P Y G C H T Y S E I A E I L Q K P K S V R A V                             | V A G G |
| UniRef90_R7FZN5        | S D F | F Q Q R R V   | W K L L L K I     | P Y G K T A T Y G E I A K R I N K A R V S A Q R A V                       | V A G G |
| UniRef90_UPI000371A3D3 | T P   | F Q Q K L V   | W E K V L N Q I   | P Y G K T K S Y K D I A V E I L G A P K A V R A V                         | V A G G |
| UniRef90_D6XXM1        | T P   | F Q Q R R V   | W D I L L K T V   | P Y G E T T R S Y Q E I A F L A G E G K N H R A V                         | V A G G |
| UniRef90_U4QV61        |       | F R L T V     | W E E L L K K I   | P Y G N T V T Y G E L A N R G I E K M S S Q R A V                         | V A G G |
| UniRef90_R6P5S8        |       | F Q R R V     | W D E L L R R I   | P Y G Q T I S Y K E L A L R I G N P K A V R A V                           | V A G G |
| UniRef90_D7JG84        |       | F Q Q K S V   | W N E L L Q S I   | P Y G A T C S Y S L S R R K L K A N E K A I R A V                         | V A G G |
| UniRef90_L7W8N0        | S A F | F E R Q V     | W A K L L I E I   | P Y G E T T R S Y G E L A A R E L A T M E A V R A V                       | V A G G |
| UniRef90_UPI00040FC4CC |       | F E R S E A V | W A M L L R E I   | P L G E T T T Y G A L A A R R L V G N R H L A Q R V                       | V A G G |
| UniRef90_UPI0003713BFC |       | F Q Q K V     | W H A L L M T I   | P F G G E K R T Y A Q I A K Q L L G H D K A V R A V                       | V A G G |
| UniRef90_D4LNM4        | S S V | F R Q Q E V   | W K L L L Q I     | P Y G G E T I T Y G E I A A R R N T S R H M S A Q R A V                   | V A G G |
| UniRef90_UPI000476E2DF | T P   | F Q Q Q E V   | W R G L L T I     | P H G G E T T Y G Q L A A E R T I G R P P L A V R A V                     | V A G G |
| UniRef90_W4E841        |       | F Q Q K A V   | W R I L L R T I   | P Y G Q T A S Y G A I A A R Q V I R R M S P Q Q A V                       | V A G G |
| UniRef90_R5HDN4        |       | F R Q A V     | W E L L M L S I   | P F G G T M T Y G E I A A Q K G I E K P E A V R A V                       | V A G G |
| UniRef90_UPI000476E2DF |       | F Q Q S V     | W Q A L L L A I   | P Q G D T L S Y G Q V A S Q R L G K P E A V R A V                         | V A G G |
| UniRef90_J2U571        |       | F R Q S V     | W K L L T T I     | P Y G Q T M T Y G H I A Q E G G K K Q S A R A V                           | V A G G |
| UniRef90_W5IKA0        | T P   | F Q Q L K V   | W D Q L L R K I   | P Y G T T C S Y K E I A Q A I N G A P K A V R A V                         | V A G G |
| UniRef90_UPI00041504E1 |       | F Q Q K V     | W Q A L L L E I   | P Y G E T T R T Y K E I A A Q K I N G A P K A V R A V                     | V A G G |
| UniRef90_R6PP46        |       | F Q Q Q R V   | W Q A L L C E I   | P V G E T A S Y T E I A A Q R I I G A P K S V R A V                       | V A G G |
| UniRef90_UPI0003B37E61 |       | F Q Q N Q V   | W R A L L R K I   | K Y G E T A S Y L D I A A K A I G N P K A V R A V                         | V A G G |
| UniRef90_A0A010QI96    |       | F Q Q K A V   | W D A M R K I     | P A G T A T Y K E L A E A A G S P K A F O S V                             | V A G G |
| UniRef90_UPI0003B780FE |       | F Q Q R E V   | W Q A L L R T I   | P C G H V M H Y G Q L A E Q L L G R P G A A R A V                         | V A G G |
| UniRef90_L0M434        | S T H | F Q Q R T V   | W L E A L R K I   | P A G K T M S Y G E V I A A R M V L V E P P G A A R A V                   | V A G G |
| UniRef90_H8I6Z3        |       | F Q Q L R V   | W E A Q L R A I   | P A R G Q T L T Y G Q I A A R M L V L E P P T S A R A V                   | V A G G |
| UniRef90_C0W6P3        |       | F Q Q Q R V   | W Q A L L R A I   | P A G E T T L S Y R E V A E R I L G A P A A V R A V                       | V A G G |
| UniRef90_C6D9R1        | T P   | F Q Q H E V   | W D A L L T I     | P S G E T T R T Y K Q I A E Q Q G R T S M S L Q A V                       | V A G G |
| UniRef90_UPI0004629EB2 |       | F R Q Q D V   | W C L L R E I     | P Y G Q V I T Y G E I A A Q Q G R T S M S L Q A V                         | V A G G |
| UniRef90_I7LQK8        | T P   | F Q H K V     | W L A L L Q E I   | P Y G K T V S Y L A L S K E L G D T N A I R A V                           | V A G G |
| UniRef90_UPI000255AB2D |       | F D E T V     | W A H L Q R I     | P Y G R T C S Y G A L A R E I G N G Q H A R A V                           | V A G G |
| UniRef90_W0PGP5        |       | F Q Q K V     | W E A L L Y T I   | P Y G T S A S Y L D I A A K K I I G N N Q K A V R A V                     | V A G G |
| UniRef90_A7GNY5        |       | F Q Q Q V     | W Q A L L T R I   | P Y G Q T A T Y S Q L A A T M I S R P T A V R A V                         | V A G G |
| UniRef90_U2WJ86        |       | F Q Q R S V   | W D Q L L V E I   | P Y G E T T W S Y G E L A A A K L I G N P N A S R A V                     | V A G G |
| UniRef90_A0A024YV07    |       | F Q Q S V     | W N A L L S E I   | P Y G S L V S Y K D V A A D S I L N N P K A C V R A V                     | V A G G |
| UniRef90_D4W8H2        |       | F Q Q K D V   | W K A L L Q E I   | P Y G Q T V S Y T D I A V R V K P K A V R A V                             | V A G G |
| UniRef90_UPI00040259DA |       | F E L K V     | Y K A L M K I     | P Y G K M T S Y K D V A A E K I N H P K A F R A V                         | V A G G |
| UniRef90_D2MXW7        |       | F Q N K V     | W Y K L Q T I     | G Y G D T R S Y L Q Q A E A I G N P K A V R A V                           | V A G G |
| UniRef90_UPI00046F9956 | T P   | F Q Q K V     | W E A L L K I     | P Y G K T I S Y K E E A K M I E N E K A F R A V                           | V A G G |
| UniRef90_S5PDJ3        |       | F Q Q K E V   | W R A L L S T I   | P F G G E T T R S Y G Q L A N Q L G S P K G G N Q A V                     | V A G G |
| UniRef90_UPI0001745B07 |       | F R K D V     | W D L L L K I     | P Y G E T T R T Y K E L A S G K Y E R V S G N Q A V                       | V A G G |
| UniRef90_E4KZX9        |       | F Q Q E R V   | W Q T L T T I     | P Y G Q T W H Y Q Q L A N A I D N P N A C R A V                           | V A G G |
| UniRef90_Q1ZX89        |       | F Q Q L K V   | W K E L L Q K I   | P Y G K T A T Y K E L A E N I G N P N A S R A V                           | V A G G |
| UniRef90_R7HVX6        | T P   | F A A Q V     | Y N A V Q K I     | P K G E T R T S Y S D I A A R E I G N P N A S T R A V                     | V A G G |
| UniRef90_A8WQU4        | T P   | F Q Q L E V   | W Q A L L C Q V   | P Y G V T V T Y S D I A K Q I Y R P G A T R A V                           | V A G G |
| UniRef90_B1YI12        |       | F Q Q Q L V   | W K A L L Q R I   | P V G S T A T Y T E L A T R L G S P K S A R A V                           | V A G G |
| UniRef90_D8PIY5        |       | F Q Q Q E A   | W K A L L L A I   | P Y G E T T R S Y Q G Q A A I A M K N P K A V R A V                       | V A G G |
| UniRef90_H1PXX5        | S D F | F R K A V     | W A L L C E I     | P Y G G T T T Y G E I A K A V A L R M S S Q A V                           | V A G G |
| UniRef90_L1M1A7        |       |               |                   |   |         |



|                        | 50  | 60  | 70 | 80 |
|------------------------|---|---|----|----|
| UniRef90_UPI0002896C79 | T A N G A N P I S I I I P P C C H R V V V   | G S D K S L L V G Y S G G G V W R K K W L L L E E H     |    |    |
| UniRef90_I7A6I4        | R A N G D N K I S I I I P P C C H R V V V   | G S D K S L L V G Y S G G G V W R K K W L L L E E H     |    |    |
| UniRef90_R75Q1         | G A N G H N N I S A I L V P P C C H R V V V | G Q A D G S L L T G G Y A Y G P E D I K A R L L L E K R |    |    |
| UniRef90_A3WAQ0        | S A N G A N N I S A V V I P P C C H R V V V | R T D D G T P S G Y R W G I D R K K Q L L L A N K       |    |    |
| UniRef90_C4K8D1        | N A C A S N H L A V V I P P C C H R V V V   | R Q D N G A L L S T G Y A G G V D R K K Q L L L A K     |    |    |
| UniRef90_UPI000463DCCE | S A C A A N T L A V A I P P C C H R V V V   | R Q D N G A L L S T G Y A G G V D R K K Q L L L A K     |    |    |
| UniRef90_K9WYP5        | L A N S L N P V S I L V P P C C H R V V V   | R G A N A S L L T T G Y A G G L E R K K R W L L L H H   |    |    |
| UniRef90_G5H330        | G A V G R N P I S I L V P P C C H R V V V   | G T N A G S L L T T G Y A G G L D K K E R L L L Q W     |    |    |
| UniRef90_A0A014PRJ0    | A A N G R N P L S V I A P P C C H R V V V   | G S D G S K L L T V G F A G G L A V A F L L L E F M     |    |    |
| UniRef90_UPI00041207ED | S A N G A N A I P P C C H R I I V V V       | G S D G S K L L T V G F A G G L A V A F L L L E F M     |    |    |
| UniRef90_G7M7W0        | M A N N K N P I P I I V P P C C H R V V V   | G T N G K L L V G Y A G G L D V K K K L L L E E I       |    |    |
| UniRef90_G9ZA93        | G A C A A N K L A S L F V P P C C H R V V V | R D N G S L L T S T G Y A G G L A R K K A E L L L R R R |    |    |
| UniRef90_I4WBE6        | A A V G R N P I S A L F V P P C C H R A L V | R D N G S L L T S T G Y A G G L A R K K A E L L L R R R |    |    |
| UniRef90_W4NRG9        | N A C A S N P V A L A I P P C C H R V V V   | H K D G S L L T A G Y A R W G V A R K K A V L L L D T T |    |    |
| UniRef90_UPI0004675941 | S A N G K N P L W L I V P P C C H R V V V   | G S D G S L L T G Y A G G L W R K K R A L L L A H       |    |    |
| UniRef90_UPI00041620B4 | S A N N R N P I P F I I V P P C C H R V V V | G A N G N L L V G Y A Y G V E M K R A L L L L M         |    |    |
| UniRef90_D9SQZ9        | M A N N R N P I A I F I P P C C H R V V V   | G V N G K L L V G Y G G G I D I K E I L L L G L         |    |    |
| UniRef90_W1Q5N1        | N A V G Q N P I S I L L P P C C H R V V V   | A H D G S L L T G G Y R G G L D M K E Y L L L G N D     |    |    |
| UniRef90_D4MZ40        | M A N N R N P I V I V V P P C C H R V V V   | A G M N G S L L T G G Y A G G L D M K E Y L L L G N D   |    |    |
| UniRef90_UPI0003465081 | N A V G H N P I A Y L I P P C C H R V V V   | R A S G A L L S T G Y R W G V D R K K A A L L L G W     |    |    |
| UniRef90_M4XLD7        | G A V G R N P I S I L V P P C C H R V V V   | R K N Q A L L S T G F G G G L P N K R F L L L Q Q L     |    |    |
| UniRef90_V4NZI5        | G A C A A N T L A I A V P P C C H R I V     | R T D G S L L S T G Y R W G V E R K K R D L L L Q R     |    |    |
| UniRef90_UPI00047EACD6 | K A I G A N P V L I A I P P C C H R V V V   | G K N G A M T T G Y R G G I E M K T F L L L Q L         |    |    |
| UniRef90_Q3A072        | G A A G R N P L A I L I P P C C H R V V V   | G A D G D L L T V G Y A G G L D K K Q A L L L Q L       |    |    |
| UniRef90_UPI000412B473 | A A N G K N N I M I L I P P C C H R V V V   | G A D G D L L T V G Y A G G L D R K K W L L L N H       |    |    |
| UniRef90_V4PGZ2        | A A N G K N P I S I L A P P C C H R V V V   | G N G K L L T G F A G G L E A K A Y L L L G L           |    |    |
| UniRef90_UPI0003B4BF53 | R A N G D N Q L A L I P P C C H R V V V     | G S D G S L L T G Y A G G L H R K R A L L L D L         |    |    |
| UniRef90_E8SN62        | A A N G Q N K V L S V M I P P C C H R V V V | G S D G K L L T G Y A G G L N R K Q F L L L A L         |    |    |
| UniRef90_UPI0003713D2D | G A C A A N R L A V A V P P C C H R A I     | R S D G T L L S T G Y R W G V E R K K I E L L L K R R   |    |    |
| UniRef90_F8GMH7        | G A V G R N P I S V I V P P C C H R V V V   | S A G A L L T G Y A G G L E R K K R A L L L Q R         |    |    |
| UniRef90_UPI0003955031 | M A N G A N P I S I V L P P C C H R V V V   | G S D A S L L T G Y A G G L A R K Q W L L L A H         |    |    |
| UniRef90_C6Y210        | A A N G K N P I S I I A P P C C H R V V V   | G A S G K L L T G F A G G L D N K A R L L L Q M         |    |    |
| UniRef90_R6P7G7        | G A V G H N P I S I I T P P C C H R V V V   | T N G S L L T G Y A G G L E T K I K L L L K H           |    |    |
| UniRef90_C9QEP6        | L A N G K N P I S I I V P P C C H R V V V   | G K N G K L L T G Y A G G V E R K K I L L L E L         |    |    |
| UniRef90_H1H8T6        | N A N G M N R I S A I V I P P C C H R I L   | G T D G S L L T G Y R G G I W R K K F L L L E L         |    |    |
| UniRef90_UPI000371A3D3 | A A V I G S N P V S I L V P P C C H R V V M | G A G G Q L L T V G F A G G L W R K Q A L L L K L       |    |    |
| UniRef90_Q2RIS2        | Q A I G S N P V S I I I P P C C H R V V V   | M G K N G R L V G F A G G L A V K E W L L L G F F       |    |    |
| UniRef90_UPI0002E2B3A1 | L A N G R N P I S I V V P P C C H R V V V   | G S T G S L L T G Y G G G I E R K K R H L L L D F F     |    |    |
| UniRef90_U7P3M9        | A A N G R N P I S I V V P P C C H R V V V   | G S D G G M T T G Y A G G L G R K K E W L L L A F       |    |    |
| UniRef90_UPI0003B4F3FD | N A N G K N R I A I I I P P C C H R V V V   | G G I D G K L V F G A G L W R K R W L L L K H           |    |    |
| UniRef90_N9WER7        | S A N G A N N V A V L I P P C C H R V V V   | R S D G S L L G G Y A Y G L P I K R R L L L K R         |    |    |
| UniRef90_G2FWI5        | M A N H N N P I S V I V P P C C H R V V V   | G K S G N L L T G Y A G G L D E I K R R W L L L D H     |    |    |
| UniRef90_H8MKL5        | L A N G A N P I S I V V P P C C H R V V V   | G A N A S L L T G Y A G G L E R K R W L L L D H         |    |    |
| UniRef90_UPI00047576C1 | A A I G A N P V L I G I P P C C H R V V V   | G K N G A L L T G Y R G G L E M K T K L L L Q L         |    |    |
| UniRef90_Q6FEA2        | A A N G K N P I S I I V P P C C H R V V V   | G A A G T L V G F A G G L D K K Q K L L L A Q L         |    |    |
| UniRef90_D3EL70        | A A I G A N P L L I T V P P C C H R V V V   | G K S G A L L T G Y R G G L E M K T R L L L Q L         |    |    |
| UniRef90_UPI00047DE3C5 | S A I G A N P I L I T V P P C C H R V V V   | G K N G K L L T G F R G G L E M K E K L L L D L         |    |    |
| UniRef90_R7FZN5        | G A V G H N P I S L I V P P C C H R V V V   | C N G D L L T G Y A G G L D K K V K L L L D R I         |    |    |
| UniRef90_UPI0003B4F3FD | G A N N Q N P V P S I I I P P C C H R V V V | G S N G S L V G Y G G G L D K K K E T L L L D L         |    |    |
| UniRef90_D6XXM1        | S A I A R N P V M I L I P P C C H R I I     | G S D G S L L T G Y A G G L D R K K A L L L D L         |    |    |
| UniRef90_U4QV61        | S A I A R N P V M I L I P P C C H R I I     | G S D G S L L T G Y A G G L D R K K A L L L D L         |    |    |
| UniRef90_R6P5S8        | G A V G H N S I S I I I P P C C H R V V V   | G A K G N L L T G Y A G G L D K K I K L L L E L         |    |    |
| UniRef90_D7JG84        | S A N R A N P I S I I I P P C C H R V V V   | G S N G R L V G Y S G G L D K K K E T L L L Q L         |    |    |
| UniRef90_L7W8N0        | S A N G A N A I S I I V P P C C H R V V V   | G A D G S L L T G Y A G G L P A K K K L L L E L         |    |    |
| UniRef90_UPI00040FC4CC | R A N G S N R I A I V V P P C C H R V V C   | G A D G S L L T G Y G G G L A R K Q W L L L E H         |    |    |
| UniRef90_UPI0003B4F3FD | Q A V G H N P V S I L I P P C C H R V V V   | G A D G S L L T G Y A G G L D R K R Q L L L E L         |    |    |
| UniRef90_UPI0003713BFC | A A N G K N P I S I I V P P C C H R V V V   | G S D G A L L C G F A G G L D T K A Y L L L E M         |    |    |
| UniRef90_D4LNM4        | G A V G H N E I S I I V P P C C H R V V V   | G T N G S L L T G Y A G G L D K K I S L L L K L         |    |    |
| UniRef90_UPI0003B4F3FD | A A N G Q N P V P I V I P P C C H R V V V   | G T N G T L L T G F R G G L Q M K Q V L L L Q L         |    |    |
| UniRef90_R5HDN4        | G A V G H N P I S I L I P P C C H R V V V   | G T N G S L L T G Y A G G L D R K V K L L L T L         |    |    |
| UniRef90_UPI000476E2DF | G A V G H N S I S I I V P P C C H R V V V   | G S D G S L L T G Y A G G L D R K V K L L L E M         |    |    |
| UniRef90_J2U571        | A A V G R N P V S V I V P P C C H R V V V   | G S D G S L L T G Y A G G L H R K T A L L L K L         |    |    |
| UniRef90_W5IKA0        | G A V G H N P I S L I V P P C C H R V V V   | G S D G S L L T G Y A G G L D K K V A L L L E L         |    |    |
| UniRef90_UPI00041504E1 | S A N N Q N P V P I V I P P C C H R V V V   | G S N G A L V G Y G G G L D K K E L L L N I             |    |    |
| UniRef90_R6PP46        | Q A I G A N G I S I L I P P C C H R V V V   | G T N R S L L T G Y A G G I E A K E R L L L N I         |    |    |
| UniRef90_UPI0003B37E61 | G A C A A N K L A L A I P P C C H R V V I   | R Q D G N L L S T G Y R W G I E R K Q A L L L M R       |    |    |
| UniRef90_A0A010QI96    | M A N G R N P I A I V V P P C C H R I I     | G S N R T L L T G Y A G G L P R K Q Y L L L N N         |    |    |
| UniRef90_UPI0003B780FE | S A C G D N P I P I I I P P C C H R I L     | A S G D K P L T G Y S G G L E T K R M L L L K L         |    |    |
| UniRef90_L0M434        | A A N G S N P V S I V V P P C C H R V V I   | G R N G T M T T G Y A G G V Q R K E W L L L R H         |    |    |
| UniRef90_UPI0003B780FE | N V M A A N P I P L V I P P C C H R V V V   | A S N G P L T G Y S G G L E V K R K L L L K L           |    |    |
| UniRef90_H8I6Z3        | G A V G R N P I S V V V P P C C H R V V V   | G A D G V L T T G Y A G G P E R K A W L L L R S         |    |    |
| UniRef90_C0W6P3        | G A V G R N P I S V V V P P C C H R V V V   | R Q D G A L L S T G Y R W G V V R K R A L L L E K       |    |    |
| UniRef90_C6D9R1        | G A C A A N R L A V A I P P C C H R V V V   | R Q D G A L L S T G Y R W G V V R K R A L L L E K       |    |    |
| UniRef90_UPI0004629EB2 | Q A L N R N P L S I L I P P C C H R V V V   | G S N G S L L T G F A G G L S H K K Q R L L L E L       |    |    |
| UniRef90_UPI0003B780FE | G A V G H N T I S I I I P P C C H R V V V   | G T N G S L L T G Y A G G I A N K K K L L L E L         |    |    |
| UniRef90_UPI000255AB2D | A A N G K N P L W I V V P P C C H R V V I   | G S N G D L L V G Y A G G L H R K K W L L L E H         |    |    |
| UniRef90_W0PGP5        | S A N H R N R I S I I I P P C C H R V V V   | G A D G S L L T G Y G G G L P R K R W L L L E F         |    |    |
| UniRef90_A7GNY5        | G A N S R N P I S I I V P P C C H R I I     | G K S G K L L V G Y T G G L W R K R W L L L K H         |    |    |
| UniRef90_U2WJ86        | S A V G K N P L L I I I P P C C H R I C     | R K D G Q L L G G Y R G G L P M K R A L L L A L         |    |    |
| UniRef90_A0A024YV07    | L A N N K N P V G I V I P P C C H R V I     | G A S G S M T T G Y G G V E R K V R L L L A F           |    |    |
| UniRef90_D4W8H2        | N A N N K N K I G I V I P P C C H R V I     | G A S G S M T T G Y V G G V E R K V R L L L A F         |    |    |
| UniRef90_UPI00040259DA | T A I G A N P V L I T I P P C C H R V L     | A K S G G M A G Y R G G L E M K E Q L L L A L           |    |    |
| UniRef90_D2MXW7        | N A N S K N K I P I E I P P C C H R V I     | A S N G L T G G Y A G G L E I K R F L L L E N           |    |    |
| UniRef90_UPI00046F9956 | S A N G H N R I A I I I P P C C H R V I     | A G K D G K L V G Y A G G L A R K K W L L L E H         |    |    |
| UniRef90_S5PDJ3        | N A N G K N N L S I I V P P C C H R V I     | S N N G E I L G G Y T G G V E A K K E F L L L K L       |    |    |
| UniRef90_UPI0001745B07 | A A N G R N P I S I V V P P C C H R V I     | G S D G K L L T G F A G G L E A K S L L L L K L         |    |    |
| UniRef90_UPI0003B780FE | G A V G H N P I S I I V P P C C H R V I     | G S D G S L L R G Y A G G L D V K R K L L L E L         |    |    |
| UniRef90_Q1ZX89        | S A N G K N T L S V I V P P C C H R V I     | T K S G N L L G G Y A G G N H I K K Q L L L A L         |    |    |
| UniRef90_R7HVX6        | M A N N K N P I A I I V P P C C H R V I     | G T S G N L L S T G Y A G G I K L K K Y L L L D Q       |    |    |
| UniRef90_UPI0003B780FE | G A C A A N N L A Y I V P P C C H R V I     | G S S G N L L S G Y R W G I A K K R T L L L Q A         |    |    |
| UniRef90_B1YI12        | T A I S K N R V L I V V P P C C H R I V     | G K K G D L L T G Y W G G L N M K R Q L L L E I         |    |    |
| UniRef90_D8PIY5        | R A C G A N P L A V A I P P C C H R V I     | R K D G G L L S T G Y R W G V E R K E Y L L L E R       |    |    |
| UniRef90_UPI0003B780FE | G A N H N N P I S I I I P P C C H R V I     | G K N G K L L T G Y R W G L F R K E M L L L D L         |    |    |
| UniRef90_L1M1A7        | G A V G H N P I S I I I P P C C H R V I     | G R D G S L L T G Y A G G I E K K I H L L L E H         |    |    |

UniRef90\_UPI0002896C79 E G  
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UniRef90\_C4K8D1 E A R  
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UniRef90\_A7GNY5 E G I  
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UniRef90\_Q1ZX89 E K  
UniRef90\_R7HVX6 E K Q N  
UniRef90\_A8WQU4 E G A E L  
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UniRef90\_H1PXX5 E K A E Y R R  
UniRef90\_L1M1A7 E G A

|                        | 1     | 10          | 20                | 30  | 40 |
|------------------------|-------|-------------|-------------------|---|----|
| UniRef90_E6MIP3        |       | F Q K K V   | W K V L R T I     | P Y G E Q T Y Q D I A N A I D N P T A P R A V A I G                   |    |
| UniRef90_V6Z035        |       | F Q Q L R V | W S A L R A K E I | P Y G Q T T S Y Q D L I A E E A V L N G C K S A Q R R A V A I G       |    |
| UniRef90_G2TLH4        | T P   | F Q Q M A V | W K A L W K Q E I | P Y G G Q M T C C S Y K E L A E E A V L N G N P K A V R R A V A I G   |    |
| UniRef90_R2PX81        |       | F Q Q K K V | W Q A L R T I     | P Y G Q M T C C S Y K E L A E E A V L N G N P K A V R R A V A I G     |    |
| UniRef90_U4QRW0        | T P   | F Q Q K S V | W E V L R T I     | P Y G Q T T S Y R E I A E A R L G S G N D D P R Y L R R A V A I G     |    |
| UniRef90_R5V986        |       | F Q Q L K V | W K L R Q N I     | S Y G G K T S T Y G G E L A A Q L S G N H P Q K A V R R A V A I G     |    |
| UniRef90_I3D7Z5        |       | F Q Q S I   | W A A L R Q N I   | S Y G G K T S T Y G G E L A A Q L S G N H P Q K A V R R A V A I G     |    |
| UniRef90_UPI0003F0CBA1 | D S F | T R R R V L | W K L L A A V     | D I G G E V V S Y Q Q L A A L L A G N P Q R A V R A V A I G           |    |
| UniRef90_J0Q6P3        |       | F Q Q Q V   | W T A L P S E V   | F Y G G E T T A S Y K A D I A Q R A I H G M N E K A F R R A V A I G   |    |
| UniRef90_A3I8T0        |       | F Q Q K A V | W H A L C S E I   | P Y G G E T T A S Y K D I A A V A I H G M N E K A F R R A V A I G     |    |
| UniRef90_R6TCQ9        |       | F Q Q K D V | W Q I L L M E I   | P Y G S V I T T Y N D I A I K K I M E K M S A Q R A V A I G           |    |
| UniRef90_F5TBX9        |       | F A L K V   | Y K A L L E I     | P Y G G E T T C S Y S E I A A R R I G G Q K P K A V R R A V A I G     |    |
| UniRef90_K5A6R4        | T P   | F Q R A V   | W K A L C E I     | P Y G G E T T R T Y S E I A A R Y L G G Q K P K A V R R A V A I G     |    |
| UniRef90_Q12L66        |       | F Q Q R Q V | W Q A L S E I     | N F G Q V C S Y S D I L A N T I L S R P K A V R R A V A I G           |    |
| UniRef90_M7DFZ6        |       | F Q Q L R V | W Q L L R A I     | P A G T T L S Y T D I L A N A L L G N P K G S A Q R A V A I G         |    |
| UniRef90_UPI0002897145 |       | F Q E K V   | W N E L L N I     | P Y G G E T T R C S Y A D I L A N A L L G N P K A V R R A V A I G     |    |
| UniRef90_R5Q1P5        |       | F Q T K V   | W N A L K R I     | P Y A R T T R T Y A E L A E E T L G N K N A A R A V A I G             |    |
| UniRef90_M5IT61        |       | F Q Q Q V   | W Q A L L T I     | P Y G G Q T W T Y G Q M A R R H I L G R P K A V R R A V A I G         |    |
| UniRef90_R7BVL0        |       | F Q Q K S V | W Q A L L Q T V   | P Y G G E T T V S Y G E L A A R R I G G Q K P K A V R R A V A I G     |    |
| UniRef90_C5WEZ5        | T P   | F Q Q Q N V | W E T L R Q V I   | P Y G G E T T I T Y G Q L L A T Q L V A C Q S A Q A V A I G           |    |
| UniRef90_A8AYF4        |       | F Q Q K R V | W S Y L S Q I     | P Y G G E T T V S Y G R L A R D L D I A S A Q A V A I G               |    |
| UniRef90_F5J2T7        |       | F Q E K A   | W D Y L N T I     | P Y G G E T T V S Y K E E A I S L G S P K G C G R A V A I G           |    |
| UniRef90_F4GS39        |       | F Q Q K K V | W Q A L L G I     | P Y G G E Y V S Y G D V A A A G L T P G H G R A V A I G               |    |
| UniRef90_G5SCRV0       |       | F Q Q K Q V | W K A L S E I     | P Y G G E T T R T Y G E I A A Q Y I D Q K P T A V R R A V A I G       |    |
| UniRef90_C2QWR2        |       | F Q Q L S V | W N T V L R E I   | P Y G G K T Y S S K I A A E T I D Q K P T A V R R A V A I G           |    |
| UniRef90_I7KP92        |       | F R E Q V   | W A A L L E I     | P Y G G E T A T Y G E L A A Q I I G I G E K R S S Q R A V A I G       |    |
| UniRef90_UPI0004698988 | T P   | F Q Q Q I V | W K G L L Q Q I   | P Y G G E L L V S Y A D L A T R Q I L G G R H K A A A R A V A I G     |    |
| UniRef90_A4JL13        |       | F Q R G V   | W Q Q L L A I     | P F G G E L L V S Y G D V L A R Q I L G G R L P P S H S A R A V A I G |    |
| UniRef90_Q1LAQ4        |       | F Q Q R R I | W Q A L C C D I   | E F G G E T T S T Y G Q L A G L G L P P S H S A R A V A I G           |    |
| UniRef90_R5XMT1        |       | F Q Q K E V | W E L L C C C I   | P Y G T T T V S Y G K I A K Q R G L E N H M S A Q A V A I G           |    |
| UniRef90_N9DD04        |       | F Q Q K Q V | W A L L L T I     | P Y G G E T T R S Y K Q I A R Q Q L G N E K A V R R A V A I G         |    |
| UniRef90_Q3J9D2        |       | F Q Q R V   | W R A L L R G I   | P A G S T A S Y S A I A R H I G A P K S A R A V A I G                 |    |
| UniRef90_UPI000309729F |       | F Q E K V   | W N R L L Q H I   | P F G G E T T V S Y G E L A S E N I G G Q P H L A Q A V A I G         |    |
| UniRef90_UPI00047820AB |       | F Q R K V   | W K A L L E I     | P Y G T A V S Y K S I A E N I G G Q P K A V R R A V A I G             |    |
| UniRef90_B4WQI5        |       | F Q Q Q V   | W R A L L Q I     | P S G S L T T Y K T I A E M I E R P K A V R R A V A I G               |    |
| UniRef90_D5ZP68        | T P   | F R E K V   | W A A L D D V     | P Y G A T V T Y G E I A A R I G G A P R A V R A V A I G               |    |
| UniRef90_UPI00031F5362 | T P   | F Q Q K Q V | W T A L D G N V   | P Y G G E T T R T Y G E I A E A R I G G R P K A V R R A V A I G       |    |
| UniRef90_C5EGB9        |       | F R Q M V   | W K I L C E I     | P Y G R S T T Y G E I A R K V I R P T M S A Q R A V A I G             |    |
| UniRef90_H1Q1C7        |       | F Q Q K K V | W S A L L D V     | P Y G G T T K S Y A W E I A K K R I G G S P K A V R R A V A I G       |    |
| UniRef90_F2RIQ4        |       | F Q R R V   | W T A L L E I     | P Y G T T T V S Y G E I A A R R V P G A V R R A V A I G               |    |
| UniRef90_R5UAT1        |       | F R Q E V   | W K I L L S I     | P Y G K T M T Y G E I A A C A K Q R S A Q A V A I G                   |    |
| UniRef90_K7AE63        |       | F Q Q H Q V | W R Q L L T I     | E Y G K T L S Y A E I A K D I A G N P A G T R A V A I G               |    |
| UniRef90_J5N316        | T P   | F Q Q K V   | W E Q L C C L I   | P P G S T L S Y A E I A L R V I G N P K A V T R A V A I G             |    |
| UniRef90_G2J9I6        |       | F C E T V   | W G A L R R I     | P Y G Q T T R S Y T E I A A A L G S P R A V R A V A I G               |    |
| UniRef90_UPI0004659C63 |       | F S Q E V   | W K A M R R I     | P V G K T W S Y S D I A A G R A G S P N A S A Q A V A I G             |    |
| UniRef90_M7DXR5        |       | F Q Q K Q V | W Q V L R R E I   | P T G S S L T Y G Q I A E R I N C P N S A Q A V A I G                 |    |
| UniRef90_D0BLW1        |       | F Q Q E R V | W K I L L Q E I   | P Y G E T T M T Y G E I A Q R I A K E K S A Q A V A I G               |    |
| UniRef90_X2GQK0        |       | F Q Q L A V | W D A L K E I     | P Y G T T T T Y A A I A E R I L G N P K A V R R A V A I G             |    |
| UniRef90_W7IXT2        |       | F Q R R V   | W A E L T T I     | P H G G E T T T Y G E L A R I L T G T L T A S R A V A I G             |    |
| UniRef90_R3TXR2        |       | F Q R N V   | W K A L D Q I     | P Y G E T T R S Y L E I A Q A I D S P T A V R A I G                   |    |
| UniRef90_F4BHF0        |       | F Q Q K V   | W Y E L L K I     | P Y G K T R T Y S E E A T N I V G S P T A F R A I G                   |    |
| UniRef90_H8LD00        | T P   | F Q Q Q V   | W K A L S T I     | P Y G E I R T Y K E V A V A V L G D S P K A V R A I G                 |    |
| UniRef90_A0A031MEA6    | S D F | Q Q Q N V   | W G E L A K V     | P A G Q T I S Y T E L A A R R V L G K P A A V R A V A I G             |    |
| UniRef90_UPI00034AC458 |       | Q R T V     | W R A L T T V     | P Y G R T A S Y G E L A R D L D R P G S S R A V A I G                 |    |
| UniRef90_UPI0003B76764 |       | F Q H L V   | W G M L R E I     | P L G A T V T Y G E L A V R L L G D R N L A R R A G                   |    |
| UniRef90_UPI0003607D55 |       | F Q Q R V   | W R A L D E I     | P Y G T T T T Y G A L A E R L G L G V P R A E R A L G                 |    |
| UniRef90_R9LY77        |       | F Q Q S V   | W N R L L D I     | P C G G T T T Y G A L A A A D L G S S P R A V A I G                   |    |
| UniRef90_H0HY07        |       | F Q Q R V   | W N A L L R E I   | P A G T T A T Y S D I A R K I T G A P K S V R A V A I G               |    |
| UniRef90_Q8A7W3        |       | F Q Q K S V | W N E L L N I     | P Y G T T I S Y A Q L S Q R L L D N P K A I R A V A I G               |    |
| UniRef90_UPI000347BAD3 | T P   | F Q Q K V   | W R A L L R E I   | S F G E T T V T Y T D I A K Q I L G R P D A V R A V A I G             |    |
| UniRef90_UPI000225E0A  |       | F Q E A C W | Q A L R E I       | S F G E T T V T Y T D I A A A L L G R P N A S R A V A I G             |    |
| UniRef90_Q7VHD0        | S T P | F R E S V   | W T I L R T I     | P Y G R T I T Y K E I A Q T L A C Q R S A Q A V A I G                 |    |
| UniRef90_UPI000369FD44 |       | F Q Q R V   | W Q A L V E I     | P Y G R T E S Y S D I A F K I S K P N A V R A V A I G                 |    |
| UniRef90_G9ERQ6        |       | F Q Q R V   | W Q A L R E I     | P A G T T L S Y S E V A Q K L G K P N A A R A V A I G                 |    |
| UniRef90_R6N8E6        | S T S | F R N E V   | W K I L L T I     | P Y G K I M T Y G E I A K L M A E N R S A Q S V G                     |    |
| UniRef90_UPI0003FBEE50 |       | F E R E I   | W A R L L R I     | P A G E T R A Y G D L A R D M D N P Q V V R A V A I G                 |    |
| UniRef90_G2K853        |       | Q I E V     | F H A L K T I     | P Y G E T R T Y T E I A E L I N R P K A V R A V A I G                 |    |
| UniRef90_UPI00040CFFEE |       | F E R R V   | W Q A L K E I     | P V G E T V S Y A E I A R R I G S P N A A R A V A I G                 |    |
| UniRef90_R6ZYH7        | T P   | F Q Q K V   | W N E L L K I     | P Y G K T S T Y M D I A K K L G L E S S A R A V A I G                 |    |
| UniRef90_B2D7X1        |       | F Q R R V   | W N K L L K I     | P Y G K T S T Y G A I A A Q L L E A S P R A V A I G                   |    |
| UniRef90_UPI00046353EC |       | F R R T V   | L D H L R E I     | P Y G Q T A T Y T Q V A A A A G S E R A V R A V A I G                 |    |
| UniRef90_UPI0004282552 |       | F Q Q R V   | W K L L Q S I     | P T G Q T I T Y G Q I A K Q L D I R S G Q A I G                       |    |
| UniRef90_I1YUL8        |       | F R Q Q V   | W N D L L L I     | P Y G E T T T Y G A L A Q Q M A H R M S A Q A I G                     |    |
| UniRef90_UPI0004642BAF |       | F Q M Q V   | W R A L A Q V     | P P G Q V I S Y A M L A E R T I G R P N A L R A V A I G               |    |
| UniRef90_U2PP56        |       | F Q Q K S V | W N E L L K I     | P Y G K T A S Y K D V A V S L G N K P N A S R A V A I G               |    |
| UniRef90_D1AFU1        |       | F Q N L V   | W K K L L D I     | P Y G E H R S Y K D Q A L A I G N K P K A V R A V A I G               |    |
| UniRef90_S2WD51        |       | F Q K R V   | W L S L P Y I     | P Y G A V S T Y K E V A Q A V I G R P R S Y R A V A I G               |    |
| UniRef90_R6VS61        |       | F Q Q K V   | W K S L L E I     | P Y G E T T R S Y K D I A V G I G G Q P N A V R A V A I G             |    |
| UniRef90_UPI00047B735A |       | F Q Q K V   | W K S L L E I     | P Y G K T V S Y L Q L I S K S G Q D V K A V R A V A I G               |    |
| UniRef90_U1N4W1        |       | F R Q R V   | W R L L A A I     | P Y G E T T T Y G A L A R E V I G G G I S P R A I G                   |    |
| UniRef90_I3IGI8        |       | F N R K V   | W S K L Q E I     | P Y G Q C Q S Y K W V A E Q I G S P K A A R A V A I G                 |    |
| UniRef90_UPI000364640E | S S N | F N M K V   | W D A L L E I     | P Y G K T A S Y S D V A A E Q I G S P K A A R A V A I G               |    |
| UniRef90_UPI00035F490A | D D F | F R Q Q V   | W R E V G A V     | P F G E T T T Y G R I A Q R L L G D R S A A Y S V A I G               |    |
| UniRef90_U1L5V9        |       | F Q Q K V   | W Q G L Q A I     | G Y G Q T Q S Y G E L A T K L N M P S A V R A V A I G                 |    |
| UniRef90_V6L7P7        |       | F R E R V   | W A A L D D I     | P Y G S T V T Y G G L A E M A G D R R A V R A V A I G                 |    |
| UniRef90_B9JSS6        | S D F | Q V R V     | W Q S L L Q I     | P L G R A V T Y S D I A Q K I G Q P T A S R A V A I G                 |    |
| UniRef90_G5F3P7        | T P   | F Q E E V   | W R E L L E I     | P C G G T L T Y G D V A R R I A G A G I R S A Q A V A I G             |    |
| UniRef90_A6WED6        | D V   | F A R S V   | W D A L R E I     | P H G S T A T Y G D I A R R L A G I G H A R A V A I G                 |    |
| UniRef90_C6DFV6        | S D F | R L A V     | W Q R L C Q I     | P Y G E Y V T Y G T V A R M G K T S M S A Q A T G                     |    |
| UniRef90_UPI000262CBD5 | S D F | Q L K V     | W E A M R L V     | P F G E V I S Y S E L A K R A G N V R A T R A A A                     |    |
| UniRef90_Q2KU90        |       | F Q Q A V   | W A G L L D L     | P F G V T I S Y S E L A R L G R N P R A T R A L A                     |    |
| UniRef90_A0R0A4        |       | F R Q L V   | Q R R L S Q I     | P Y G H T M S Y K G V A E I V G N P N A V R A V A I G                 |    |

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G A V G S N P I P I L I P P C C H R V I A G G K N Q L L T T G Y G F G G G L P A K R K F L L D E R L L  
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H A C A H N E L A L I I P P C C H R V I S Q K N G F L T S T G Y R W G G L W R K K E W L L S R Q R H  
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G A V G H N P I S I I I P P C C H R V I V G S S N G S L L T T G Y A G G G I D K K I A L L T H  
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T A I G A N P L L I T V P P C C H R V I V G K N G H M T G Y R G G G W R K E W L L L K V L  
A A N G A N P I A I V V P P C C H R V I G K G G Q L L T T G Y A Y G L A M K Q Y L L L D E R L L  
G A C A A N R L P A V A I P P C C H R V I R R D K S L L T S T G Y S W G T L E R K R A L L L E R L  
Q A N R K N P I P I V V P P C C H R V I R G K D K S L L T S T G Y S W G T D L D L K K E K L L L E R L  
N A N N K N P I A V I I P P C C H R V I G A N G A L L T T G Y A S G L D I K K A F L L N L L  
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V A V G E N P F S I I V P P C C H R V I V G A D G S L L T T G Y A G G G F E A K K A F L L L K V L  
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S A N G K N N I P I S I I V P P C C H R V I A S N E G T G L G Y A Y G L E V K K K L L L L K H  
T A V G R N P L T I I V P P C C H R V I A S T G R L N G Y T G G L E R K F A L L L E L L  
N A C A A N K I A I F I P P C C H R V I G K N N K L G G Y K W N T L E R K K A L L L K H  
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| UniRef90_R5LCT1        | FQ  | YL   | WLETSKI       | PFQKGLVLTSY  | SDILAQAALIN  |
| UniRef90_J0YS53        | ST  | IF   | QKQVWMLC      | EVEFC        | GTITTSYSEAD  |
| UniRef90_G0EN44        | FQ  | YNV  | WMTSLKI       | PFQKGLVVTTSY | SDILAQAALIN  |
| UniRef90_UPI00037DF005 | FQ  | RRV  | WDAISAI       | PRGRTVRTTYG  | QDLAQAALIN   |
| UniRef90_D3NQG6        | TP  | FR   | RSWDMRQI      | PPYGGTATSYG  | QDLAQAALIN   |
| UniRef90_R9LCW8        |     |      | VYQMVLRQI     | PKGRVVASYSY  | GQDLAQAALIN  |
| UniRef90_M2XA23        | SGP | FLE  | ETAVEVLRKI    | VPAAGEPVVTYT | EFASLSSGRD   |
| UniRef90_I0AP93        | FQ  | KKV  | WNEELKI       | PFGGKTITTSY  | QAALERLVGSD  |
| UniRef90_A0A024K0J5    | FQ  | RRV  | WLEHLNLI      | GYGATATASSY  | AALERLGGSD   |
| UniRef90_UPI0004121E81 | NF  | FE   | EKVVAVVVK     | EIPYGRVTTSYG | AIAKYLGLMS   |
| UniRef90_W7BRL9        | FQ  | EQV  | WVQLKEI       | PPYGGTTSWSY  | QAALANGLGMS  |
| UniRef90_D2UEG7        | FQ  | RRV  | WEALLDI       | PYGTTSWSYQA  | QDLAQAALIN   |
| UniRef90_H0E500        | FQ  | RRV  | LEATARI       | PYGATSSSYRD  | VAVATVAGNS   |
| UniRef90_I5AWP1        |     |      | KRIYEAVKMI    | PKGKCVATYAQ  | QIAEAGNKGK   |
| UniRef90_R7N6Q2        |     |      | KRIYEAVKMI    | PKGKCVATYAQ  | QIAEAGNKGK   |
| UniRef90_T0GH13        | FQ  | VK   | WEALMSI       | PEGSVLITTSY  | EDLAEERTGSS  |
| UniRef90_A0A024K9P3    | FQ  | ER   | LQVREMLKI     | AWGGETTSYGE  | LLAERLVGGSD  |
| UniRef90_UPI00041E23E7 | TP  | FQL  | QVWQLSLDI     | SYGASTTSHQ   | QVLAELVGR    |
| UniRef90_J1HIT9        | FQ  | LRV  | WDAISAI       | PRGRTVRTTYG  | QDLAQAALIN   |
| UniRef90_N6XJ36        | TP  | FR   | RRVWAEISAI    | PYAGQTRTSYGT | DILAARLIGSS  |
| UniRef90_UPI00047BFDDF | FQ  | LRV  | WDAISAI       | PRGRTVRTTYG  | QDLAQAALIN   |
| UniRef90_G2KRW6        | FQ  | LRV  | WQALRLKI      | PSGGSVTSYSY  | KAVALDAIGKT  |
| UniRef90_S6AN68        | FQ  | SRV  | WQALRLKI      | PSGGSVTSYSY  | KAVALDAIGKT  |
| UniRef90_UPI00026C7E67 | SP  | FQ   | KMAWQALTLQI   | PYGETRYSYAQ  | QLANSRLGK    |
| UniRef90_UPI00047006FF |     |      | RKRTVWAAALQHI | VYGGQTTITSYA | EALAAKAGG    |
| UniRef90_R6VL31        |     |      | KRIYEAVKMI    | PKGKCVASYSY  | QVALAAAMAGN  |
| UniRef90_UPI000248EDD7 | NF  | FE   | ERVYEVVQVI    | VPKGRVVTTSYG | AIAKYLGLMS   |
| UniRef90_B2SY70        | FQ  | KRV  | WQALISDI      | PPGVVLITTSY  | GQDLARQLGSS  |
| UniRef90_D1B9L5        | TP  | FQ   | VRWRRLISI     | PYGRATATYGE  | LARDMDGMS    |
| UniRef90_H0US97        | FQ  | RRV  | WDAISAI       | PRGRTVRTTYG  | QDLAQAALIN   |
| UniRef90_F4F5A6        | SD  | FER  | AVWREMTRI     | PYGETLITTSY  | GQVAVRLVGGSD |
| UniRef90_A2S942        | TP  | FQ   | HRWYHAI       | CCVVLITTSY   | GDLAKQVIGSS  |
| UniRef90_B3T9A2        |     |      | KVYKKLRLQV    | PEGKVTITTYG  | DLAKAVVGLK   |
| UniRef90_A0RUF9        |     |      | ERVYKELC      | CCERV        | PEGKVTITTYG  |
| UniRef90_I1F9Q5        | FQ  | SKV  | WYKLEIRI      | LPKQGTITTSY  | GEVAVLITGSE  |
| UniRef90_H0TUS2        | FQ  | RRV  | WDAISAI       | PRGRTVRTTYG  | QDLAQAALIN   |
| UniRef90_UPI00036BDA11 | SGP | FRE  | HVAALRRTV     | PAGAPVVTYRE  | CCALALAGRR   |
| UniRef90_Q2SDC6        | FQ  | QEV  | WASALSDI      | ESYGRVTSYRE  | VIAQAVLGNP   |
| UniRef90_UPI000422E649 | FQ  | RRV  | WDAISAI       | PRGRTVRTTYG  | QDLAQAALIN   |
| UniRef90_F7ZCJ1        | FQ  | KAV  | WDALYAI       | PFGRVTSYGD   | IAKALGVIPAR  |
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| UniRef90_A4YH39        | FQ  | RRV  | WDAISAI       | PRGRTVRTTYG  | QDLAQAALIN   |
| UniRef90_D4GLQ9        | SDS | FKQR | IWQIVAAI      | PPGRVVTTYGD  | VAVLLAGGST   |
| UniRef90_UPI0003798A0B | SP  | FR   | KLVYKEIMKI    | KWGGQVVKTY   | KEVAVSQRLLQ  |
| UniRef90_K1G9Q5        | SET | FQ   | NEVYSSVRE     | IPAGRVTTSYG  | DIAVALLGDM   |
| UniRef90_C5R8R6        |     |      | KVYKKLRLQV    | PEGKVTITTYG  | DLAKAVVGLK   |
| UniRef90_E8N9B7        | FQ  | TRT  | AALQATIDI     | EPGSIMASYSY  | GEVAVLLAGGA  |
| UniRef90_A3TR44        | SD  | FHHR | VYELARARI     | IPGSETVTVYGE | VAVLLAGGD    |
| UniRef90_E8SK82        |     |      | KVYKKLRLQV    | PEGKVTITTYG  | DLAKAVVGLK   |
| UniRef90_D5EJ48        | FQ  | VQ   | VWNAVREI      | PPGKHLMDYAG  | AVRMIAGN     |
| UniRef90_H1Z563        | ST  | HF   | FERVYDLVMEI   | PKGRVVTTSYG  | ALAKAVIGGA   |
| UniRef90_B5IF39        |     |      | FQ            | YDLVMEI      | PKGRVVTTSYG  |
| UniRef90_D1Y4C9        | FQ  | EQV  | WVQLKEI       | PPYGGTTSWSY  | QAALANGLGMS  |
| UniRef90_UPI0003B4A12A | SP  | FT   | ARVLRRTLAEKV  | PRQGRVATSYG  | ELAEMAGD     |
| UniRef90_Q47YU1        | FQ  | IKV  | WEALINT       | HSQSQQLS     | YSQVLSQIT    |
| UniRef90_F9YIE5        |     |      | RRVWDAISAI    | PRGRTVRTTYG  | QDLAQAALIN   |
| UniRef90_U5EAK0        |     |      | WYELVLRKVI    | PAGEPVTYTEF  | AVAGLSGR     |
| UniRef90_W7E483        |     |      | QLKVWEALQTI   | PYGETRYSYQD  | LVVHITGGSP   |
| UniRef90_UPI00036FD42B | FQ  | EL   | GWGLREI       | PPGSPVLPYAG  | FVAALVLRG    |
| UniRef90_W9DRA3        | FQ  | RE   | LVLEEVRKI     | PYGETVTVYRE  | LAVCRVLRGRE  |
| UniRef90_R9H4L5        | FQ  | IKV  | WEALRLKI      | PNGE         | LVITYSGLAG   |
| UniRef90_K0PJ94        | DA  | FQ   | KVVYDAAARHI   | GWGTTTMTYGA  | LAKKGA       |
| UniRef90_V4RV38        |     |      | FQ            | DR           | CVYEVARRI    |
| UniRef90_E0QKP8        | SSF | GQK  | VIVVSAI       | PYGSYMYC     | EVAKAAGSE    |
| UniRef90_G8UXU2        | SP  | FQ   | KKALAIIDI     | PYGETRYSYQ   | LQQLAKVIGN   |
| UniRef90_H1CGI3        | FQ  | YER  | VYELVRI       | PYAGKCVATYQ  | QIAEAGNKGK   |
| UniRef90_T0JF20        |     |      | FQ            | KGV          | WKTLLDI      |
| UniRef90_D5CP39        |     |      | VWQAMLLDI     | PYGETLITTSY  | AT EAKKFGN   |
| UniRef90_UPI0002D7F593 |     |      | FQ            | RRV          | WDAISAI      |
| UniRef90_A4G2A0        | TP  | FQ   | QVWAAJIGE     | IPYGRVVTTSY  | GDIARRRVSS   |
| UniRef90_R7U7E5        | DS  | FQ   | KVWKTLLVTKI   | VPLKETTITTY  | GEVAVLLAGS   |
| UniRef90_E2C4Q7        | FQ  | VQ   | WVWVMTI       | PRGESITVYEE  | VAVLIGH      |
| UniRef90_E6Q4X5        | TP  | FQ   | EQATLRATV     | DI           | PPGEVRSYGW   |
| UniRef90_A0A024QBP5    | FQ  | FE   | QVYQIRVAKI    | PEGGVATSYSQ  | IARAALGRQP   |
| UniRef90_D3EAM9        | SP  | FQ   | QEVWGRRLRI    | PPGQVTSYGE   | IAAAMGRP     |
| UniRef90_A6GWL0        | DN  | FER  | VYVLRQI       | PKGKVTTSYG   | AIALRVLGT    |
| UniRef90_UPI0002193248 |     |      | FQ            | RRV          | WDAISAI      |
| UniRef90_UPI000465A152 | SGP | FQ   | LTHAVVLRKVI   | TPNGPVTYTA   | FAFADLISGR   |
| UniRef90_G7H1Q5        |     |      | FQ            | RRV          | WDAISAI      |
| UniRef90_F7UVI5        | FQ  | NR   | VFRVLRQI      | PRGKVTITTY   | GQVAVRLVGGSD |
| UniRef90_E6PLE4        | FQ  | ER   | VWQQLLAI      | PYGTVTTSYG   | AVRGLGAA     |
| UniRef90_W0FMC7        | FQ  | AD   | RVFLVLRQI     | PKGKVTITTY   | GQVAVRLVGGSD |
| UniRef90_UPI0003780977 | FQ  | AKV  | WQALGKI       | PKGKVTITTY   | GQVAVRLVGGSD |
| UniRef90_I0JYD8        | FQ  | YK   | MVLRQI        | PKGKVTITTY   | GQVAVRLVGGSD |
| UniRef90_D1C0H8        | FQ  | ER   | HAWDVLRLGI    | PGGVTITTYQ   | YAVRSGR      |
| UniRef90_W7B4X3        | FQ  | QA   | VYDILIQI      | PEGKVTITTY   | GQVAVRLVGGSD |
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UniRef90\_Q5FS08 R Q K V W D A L R R E V P Y G Q T R T Y A D I A A E V G G S A R S V G  
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UniRef90\_UPI000463A250 Q A L G R N P F M I T V P C H R V V V E T T G H Y A G G S V S Q R R L L E Q

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UniRef90\_E4PH23 K A L G K L P E G H V V P W Y R V V V N S N G Q R T A F P V I G S E E E Q V S R L L E A

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UniRef90\_M7T3B2 R M M N Q N P D A D D M P C F K I V Y S D G K L G G G F G L G I D D K I R R L K Q

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UniRef90\_F2PL33 N A M K T N P F A P E V P C H R V V V A S N R T L G G G Y K G S W G E K T K L L R

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UniRef90\_T0U9A3 R A M K Y C P E S L P A H R V V V R A D G E I L V G F T A V E R K Q R L L E A

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UniRef90\_I5C5M8 Y A M N A A H S Q P D V P A H R V V V N R L G L L T G H F A P D E M A R R L L A

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UniRef90\_UPI00036F212D Y A L R A T D D T L A V P W H R V V V N A K G E I S P R R E G M D I Q R S R L L E A

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UniRef90\_H8GGI7  
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UniRef90\_Q5FS08  
UniRef90\_G2QNJ5  
UniRef90\_T0U9A3  
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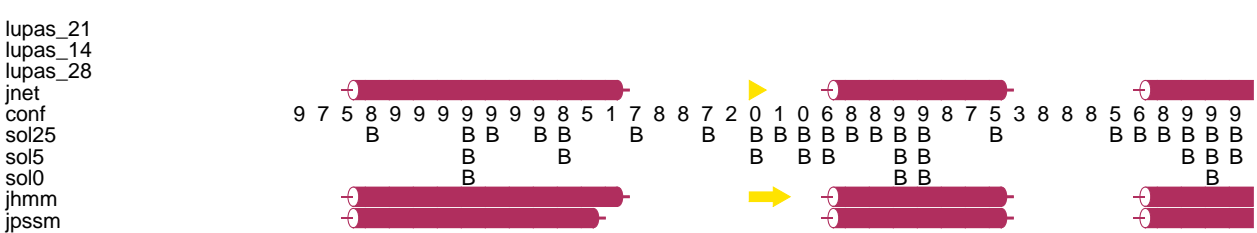
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| UniRef90_J5J722        | VCL  | KHRWNHATV   | PWQRVVV  | NARGVIVISPRNHPTAVQAELLRD   |                          |
| UniRef90_EOSR80        | KIL  | SENIHPAIV   | CHRRVVI  | NSDGGKIVGGYTTGGKKKYKLLKRL  |                          |
| UniRef90_Q9HKY3        | YML  | SINEDPDTI   | PCYRRVV  | LHDGDMIVGGNYTGGPMEYKVRRLRA |                          |
| UniRef90_R9PS01        | RCL  | KTLPEEDSNLP | WHRRVVI  | NAKGMITGSGFPHGGGAQRQRLLED  |                          |
| UniRef90_UPI00036597D1 | RAM  | GQLPDGSHGL  | WHRRVVI  | NASLKVITGSGGAVQRQREQQLRA   |                          |
| UniRef90_E3BHM8        | KAL  | GKLPKPDST   | WFRVVI   | NSQGGKILTKGKGFDFRQQQALIA   |                          |
| UniRef90_H6KZM1        | YAL  | NKCCPADLV   | PHRRVVI  | NRLGRITGKHFGGQTMQALLEA     |                          |
| UniRef90_C0C4E2        | YAL  | HVVVPDSMHL  | CHRRVVI  | TKEGRVSGAFVGNRQARMML       |                          |
| UniRef90_W2EP10        | SAC  | AQNLVAFV    | CHRRVVI  | PSSTNSGGYGGYYGTPVVKEWLLA   |                          |
| UniRef90_E9AYG0        | VAM  | GANPLPVLIV  | CHRRVVI  | SSSTNSLIVGGYGPGLRFKVVWLLRH |                          |
| UniRef90_W4LQU9        | AAL  | RDHPQPPLV   | WQRVVI   | NAQGGKVLSTGPPRQVQELLEA     |                          |
| UniRef90_UPI000463A9C9 | WAL  | KKLPPEETQL  | WHRVVI   | NAQGGKLLSHNQQRQRRLLS       |                          |
| UniRef90_C6XXA2        | YAM  | SNAAGADPPV  | PHRRVVI  | NSSGLLTGHFKTPDLMQEELLEK    |                          |
| UniRef90_J0GWN4        | NAN  | YNNRYKPIK   | SYK      |                            |                          |
| UniRef90_W2ECW0        | RTL  | HSMSSKYQL   | WHRVVI   | NSLGEISSLIKDDEELALQKARLLE  |                          |
| UniRef90_N2JSB3        | RTL  | SRLEPGTTRL  | WHRVVI   | NSADGGRISLIPSDSDEALPEQRQL  |                          |
| UniRef90_R6UJ50        | RAL  | KMSHLVLYGEY | CHRRVVI  | NHKGRRVIVISLPGSGWDEQITLKA  |                          |
| UniRef90_UPI00047784EC | GAC  | AHNPVLVIV   | CHRRVVI  | PASYGGRTRGAPVAVKAWLLAH     |                          |
| UniRef90_X6MWS6        | ENC  | VEMAENMVP   | CHRRVVI  | SSDLTITGGTFSGKLEEKVSLKA    |                          |
| UniRef90_F0YZS4        | YAL  | SRGLAENKDA  | PHRRVVI  | NSAKGILSGAATAPTDLQKQMLLEK  |                          |
| UniRef90_K5YDU3        | RMA  | QQLPDDTRL   | WHRVVI   | AAGGRLSLPAGSPAERMRRLRA     |                          |
| UniRef90_C0GFZ1        | QAM  | ANRRTVLRV   | CHRRVVI  | KSDGGGLGGFSSGLSWKERLLQL    |                          |
| UniRef90_F4BMK3        | RIL  | HSMSSQKYDLP | WHRVVI   | INAKGEVAKDAEAGFTQKDRLLS    |                          |
| UniRef90_V4JMI3        | GAC  | RANPYPLLV   | CHRRVVI  | AVHGLAGFFSSG               |                          |
| UniRef90_J9YGY0        | KCL  | REINADCC    | HWHRRVVI | RADGKLVAGFAGSADDEQRERLAE   |                          |
| UniRef90_F0XA69        | NAM  | RNLFAPMVP   | CHRRVVI  | IKRKGQKLVGSGITLAEKRSLLRM   |                          |
| UniRef90_UPI00035C65BD | YAL  | NNGDLAGYHI  | PHRRVVI  | NRLGGQLTGYFEGDSMRERLLEQE   |                          |
| UniRef90_N1QK18        | RAV  | GNNPFLGPEV  | CHRRVVI  | LAADGTLTGGFAGWGANEKHKLLE   |                          |
| UniRef90_N6YI58        | QAC  | GANPFPLIV   | CHRRVVI  | TSAAGLGGFAWLELVKRWLLAF     |                          |
| UniRef90_A6CT84        | RIL  | HSMSSGKYKLP | WHRVVI   | NAKQILALQDDDEAFYEQKMLLEA   |                          |
| UniRef90_UPI00037FCD77 | WAM  | NKAHGIDDI   | PHRRVVI  | NRKGEILSGHFATPTLMQERLEEA   |                          |
| UniRef90_W6MQV1        | QCL  | KYEFNVSNV   | WWRVVI   | SSSGIISLPRTDGVRLLKQKLLLEE  |                          |
| UniRef90_N9CJP5        | YVL  | RHLSAEHTV   | WHRVVI   | NAQGGKILSLSAQGENILQTLKLE   |                          |
| UniRef90_F8FKM1        | RIL  | HAMSRTHQV   | WHRVVI   | NSSTGEILALRDEESREKQLLLAG   |                          |
| UniRef90_UPI000403A73D | WAM  | SSGYTEHGL   | PHRRVVI  | NKQGEILSARHETPTTMMQEQLLES  |                          |
| UniRef90_G7FMQ5        | RLL  | KIMPSDSSV   | WHRVVI   | NSQGGKILAFVVGSSYQERQKLLS   |                          |
| UniRef90_Q4WA00        | ICL  | KHFFHSGNV   | PWQRVVI  | NSKGMILSKFVIGSAERQAELRQ    |                          |
| UniRef90_A9DIQ8        | KAL  | KMAGTLLNL   | WHRVVI   | NSQGGKILSKFPDTEETQMQLLR    |                          |
| UniRef90_L5N3C6        | RIL  | HAMSDDKYSLP | WHRVVI   | NRNNGEIVLSSGEERQQLKLEA     |                          |
| UniRef90_E2XX16        | RTL  | SQLEPGETRL  | WHRVVI   | GAGGRIISLPVIGSADDEQRRLRA   |                          |
| UniRef90_UPI0003B69F81 | HAV  | GRNPITGIP   | CHRRVVI  | GADCSLTFAGGGLDRKVFLLLEL    |                          |
| UniRef90_J9S566        | TIM  | GINPVLIV    | CHRRVVI  | AGDGLGGYRSGGGLATKRWLLFEF   |                          |
| UniRef90_K1XW55        | TCL  | KHRFVSPANV  | PWQRVVI  | NSKGVISPKRGHGANAQVLRG      |                          |
| UniRef90_R5WQ52        | LAI  | AANRLLAVAV  | CHRRVVI  | CGDGGGGGYRWGRERKKAIVDW     |                          |
| UniRef90_UPI00036B46BB | RIL  | CGQNRLLLEI  | CHRRVVI  | RSDDLGLGGFSSHGVLKLLKLLK    |                          |
| UniRef90_A9HE18        | NAN  | SVNPLPLLI   | CHRRVVI  | SVQLGGYSGDGLTDKLYLLGL      |                          |
| UniRef90_X7Z205        |      | WPTGGLL     | SPSL     | SRAIGSLG                   |                          |
| UniRef90_R5RCP9        | LVL  | RRAQYYGDY   | CHRRVVI  | NHCGRLLVPGWDEKQYLLAR       |                          |
| UniRef90_M1VMS2        | TAL  | RKNPYWPKV   | CHRRVVI  | ADRTLGGYMGQLERKCIIMLE      |                          |
| UniRef90_K2C1U6        | HAL  | HANKDSS     | T        | CHRRVVI                    | NAAGRLLAPAFGGSLLEQYAKLKN |
| UniRef90_UPI00047B938B | QVM  | GSNPLPLIV   | CHRRVVI  | ASNIGGGYSGGSLIEVKRWLLTM    |                          |
| UniRef90_I3XQF7        | YCL  | SINPKLPVIV  | CHRRVVI  | YSDGGTGGFSLGGHVKKLLSL      |                          |
| UniRef90_UPI00046AF68A | SAM  | RHLPDGHLEL  | WHRVVI   | NASLKVITDHHGGAVNQRACKLRS   |                          |
| UniRef90_F4B561        | IAL  | SKNPVLLLI   | CHRRVVI  | SEKGLGGYSRGL               |                          |
| UniRef90_R5RDF3        | KIL  | SHASMYGDY   | CHRRVVI  | NSAGRLLVPEWYEQRDLELLE      |                          |
| UniRef90_K2AI64        | TAV  | GRNPISFLV   | CHRRVVI  | ALRKSGLGGYHWGLPVKRAMLAW    |                          |
| UniRef90_UPI0003B6CF7D | MAL  | KSNRFAFFV   | CHRRVVI  | AKNGIGGGYSAGVLEKLLNLLKW    |                          |
| UniRef90_H8MJH9        | HAMA | ALGSRAAV    | PWQRVVI  | INRTGGISTSGHRQRELLLEA      |                          |
| UniRef90_UPI0002631612 | QLC  | ARNPPLLV    | CHRRVVI  | NTGGRLLGAYSAGPMTKSWLLDH    |                          |
| UniRef90_R9AXW7        | RVL  | RQVLEPKHL   | PWQRVVI  | NSQGGKILSLARGDNLQIVKLLQA   |                          |
| UniRef90_UPI00045GMP1  | WAL  | RRLSPLPPI   | PWQRVVI  | NAQGGKILSSAREGSDNQLRELLIS  |                          |
| UniRef90_W8XX18        | AAN  | GANPVSIVV   | CHRRVVI  | GRNGTMTGYAGGVQRKEWLLRH     |                          |
| UniRef90_R4YPQ7        | RTL  | KKHLPKDSRL  | WHRVVI   | NAQGGKILSFPFGSWSVQKDKLAD   |                          |
| UniRef90_R8ZSG0        | YAL  | NKQKDRSEI   | PWQRVVI  | NRQGRISFKGVDLQKDKLQOS      |                          |
| UniRef90_S3NNP0        | RVL  | SQILDATSEL  | WHRVVI   | NSQGRILEKYAAGENLQSLKLLMQ   |                          |
| UniRef90_Q05X49        | WAL  | RRLALHSP    | WHRVVI   | NARGAMSPSREGTDIQRELLLA     |                          |
| UniRef90_A8GST4        | NAN  | GMNQLAIV    | CHRRVVI  |                            |                          |
| UniRef90_A0A022L5H4    | SIM  | GANPVPILIV  | CHRRVVI  | AGDGLGGYSGRGLLETKRWLLLEH   |                          |
| UniRef90_R5XET4        | YAL  | RLTGKAGQK   | TAYR     | VVNAQGGYLLSAGAFEDMQRLLLEK  |                          |
| UniRef90_UPI0003F72B74 | WFL  | NQSF SQTEV  | PHRRVVI  | NRLGRLLTGHFPTPTLMQELLEK    |                          |
| UniRef90_B0RR48        | KLL  | SSNQDAAL    | WHRVVI   | NSDGRILAPEGGYQACQQRRLRA    |                          |
| UniRef90_UPI000444A8A6 | SAL  | RNNPFAPIYV  | CHRRVVI  | ASNMFVGGGFFG               |                          |
| UniRef90_H9UCJ7        | YAMA | SNPLPLYI    | CHRRVVI  | GKDSIGGGFRNGIKWKEYLLKL     |                          |
| UniRef90_UPI0002E09357 | VGN  | HISTRPALH   | GAYR     | VLMADGKLSGFRWGSADPRAVLES   |                          |
| UniRef90_A4FF18        | VVL  | ARNPVPVIV   | CHRRVVI  | TRGESGHEHVGARARQERMLRS     |                          |
| UniRef90_UPI000314FC83 | RVL  | SQNTDRTL    | WHRVVI   | LRADGRJAFPEGGYREQQRRLRA    |                          |
| UniRef90_UPI00036FEEB4 | RIV  | GWIMRTDDL   | WHRVVI   | SASGRPAALHLLATRQLLELRA     |                          |
| UniRef90_U6EKX0        | NAN  | GANKFYGLI   | CHRRVVI  | NNNGELGGYGSGLDRKTWLIEY     |                          |
| UniRef90_R2PMD3        | RVL  | HQAKEYAYDYP | CHRRVVI  | NSQGA                      |                          |
| UniRef90_U1JT24        | RLL  | KELPKSTL    | PWQRVVI  | NSQGGKILSFPYGSQTEQKTRLLQM  |                          |
| UniRef90_R7EU76        | NIL  | HFNRPPLAL   | CHRRVVI  | NCGRLLAPHFGGPLEIQKERLLEA   |                          |
| UniRef90_S9PDF9        | LAM  | GDPRSAAQV   | PWQRVVI  | INRSGGISTLEAQERLLEA        |                          |
| UniRef90_K2AF73        | RTL  | SENKDEIY    | CYK      | VVNNWKLGGYNLWVWEKIRKLEK    |                          |
| UniRef90_M5SKD1        | QLL  | GASFDAL     | PWQRVVI  | YNDGRLPVLNPSLQEQRLLE       |                          |
| UniRef90_E1ZIS2        | SAL  | RQLDRHTEV   | PWQRVVI  | SADGSLHPGSKVATQQQKLLRE     |                          |
| UniRef90_UPI000406DEB1 | RTV  | GWIMRTDDL   | WHRVVI   | PASGRPAAGLAAARQLARLRD      |                          |
| UniRef90_V9ZVB4        | KVL  | RETDK       | L        | WHRVVI                     | GAGGTLSLPLKGGFDEQLGRLLQE |
| UniRef90_F6EVS8        | WIL  | KTDGAD      | PWQRVVI  | RADGTLPGHLADKQAGLLTS       |                          |
| UniRef90_A3YF74        | RIL  | KMLPKDTEL   | PWQRVVI  | KSNYEIAFEQDSDARQKTLLEA     |                          |
| UniRef90_NOBD28        | LAL  | HLETERDLDV  | WHRVVI   | AKGGALGRGPHRDQQAARLVR      |                          |
| UniRef90_UPI0003B5BE79 | V    | MARYGSDV    | PWQRVVI  | RASGEPACHHGRALHYL          |                          |
| UniRef90_G3AIM4        | SSL  | KHLSGITINI  | PWQRVVI  | SSSGKILSPRNSGQYIQAARLRE    |                          |

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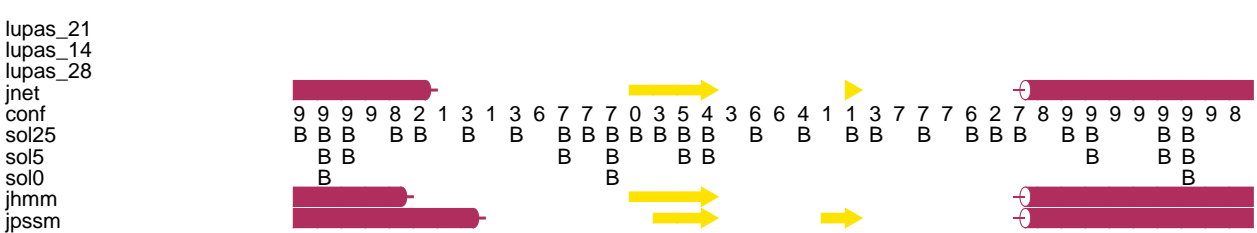
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