

QUERY 1 10 20 30 40  
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QUERY UniRef90\_E8WUF0 UniRef90\_D3VC27 UniRef90\_Q1XPX9 UniRef90\_C5CXQ9 UniRef90\_UPI00037E490A UniRef90\_Q1JXR7 UniRef90\_F4LKU6 UniRef90\_F7YIJ5 UniRef90\_C4XT62 UniRef90\_D4IF81 UniRef90\_UPI0002F401E7 UniRef90\_W1N5R8 UniRef90\_E1YGV3 UniRef90\_Q1LH11 UniRef90\_UPI0003B578C0 UniRef90\_UPI000468D2D6 UniRef90\_UPI0003B6EC67 UniRef90\_UPI000255D9E6 UniRef90\_A0A011QRB2 UniRef90\_UPI0003720CCA UniRef90\_F0JEC6 UniRef90\_M7N9N9 UniRef90\_B8DJV0 UniRef90\_UPI00037A2D6F UniRef90\_K0NFP6 UniRef90\_N6YRX2 UniRef90\_D4H200 UniRef90\_J2KVX3 UniRef90\_C6XBZ1 UniRef90\_M6CS35 UniRef90\_Q93NZ9 UniRef90\_H2CLR0 UniRef90\_D6ME96 UniRef90\_D5MGJ8 UniRef90\_UPI0003828836 UniRef90\_A5ER32 UniRef90\_UPI00037CA7C7 UniRef90\_Q2RUJ8 UniRef90\_UPI000329AEE8 UniRef90\_UPI00037841BD UniRef90\_UPI000347AF01 UniRef90\_UPI000316897D UniRef90\_UPI0003B4668F UniRef90\_G3IVE6 UniRef90\_F7NL65 UniRef90\_S6BEK2 UniRef90\_W6MOQ4 UniRef90\_K9V7M0 UniRef90\_UPI000363224C UniRef90\_D8GPV0 UniRef90\_UPI0002E65A64 UniRef90\_Q8PIM5 UniRef90\_G7FPK5 UniRef90\_A3DDL3 UniRef90\_Y0KNB8 UniRef90\_UPI0003123C83 UniRef90\_U5MRK2 UniRef90\_UPI0004756BA7 UniRef90\_UPI000369FD8C UniRef90\_A0A017RVF9 UniRef90\_UPI00037F46D1 UniRef90\_Q0HIF6 UniRef90\_I3YG24 UniRef90\_C9YEI3 UniRef90\_K8WBI2 UniRef90\_R6M6S7 UniRef90\_HOTA47 UniRef90\_E1R3P4 UniRef90\_UPI00047B844B UniRef90\_A3DCP8 UniRef90\_A0A023SB03 UniRef90\_R4YL51 UniRef90\_UPI00035EE08D UniRef90\_E4U252 UniRef90\_UPI0004764001 UniRef90\_M1MKA0 UniRef90\_F3KCZ1 UniRef90\_U1J9S0 UniRef90\_A0A023DC73 UniRef90\_UPI000374D511 UniRef90\_UPI0002DD247 UniRef90\_UPI000469783C UniRef90\_D5XFF0 UniRef90\_UPI000471QHC8 UniRef90\_D9SEV9 UniRef90\_W6N8B7 UniRef90\_C4XM23 UniRef90\_H4F1D2 UniRef90\_UPI00047AEB4A UniRef90\_UPI000468EA31 UniRef90\_W9V931

50 60 70 80

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

QUERY UniRef90\_E8WUF0 UniRef90\_D3VC27 UniRef90\_Q1PXP9 UniRef90\_C5CXQ9 UniRef90\_UPI00037E490A UniRef90\_Q1JXR7 UniRef90\_F4LKU6 UniRef90\_F7YIJ5 UniRef90\_C4XT62 UniRef90\_D4IF81 UniRef90\_UPI0002F401E7 UniRef90\_W1N5R8 UniRef90\_E1YGV3 UniRef90\_Q1LH11 UniRef90\_UPI0003B578C0 UniRef90\_UPI000468D2D6 UniRef90\_UPI0003B6EC67 UniRef90\_UPI000255D9E6 UniRef90\_A0A011QRB2 UniRef90\_UPI0003720CCA UniRef90\_F0JEC6 UniRef90\_M7N9N9 UniRef90\_B8DJV0 UniRef90\_UPI00037A2D6F UniRef90\_K0NFP6 UniRef90\_N6YRX2 UniRef90\_D4H200 UniRef90\_J2KVX3 UniRef90\_C6XBZ1 UniRef90\_M6CS35 UniRef90\_Q93NZ9 UniRef90\_H2CLR0 UniRef90\_D6ME96 UniRef90\_D5MGJ8 UniRef90\_UPI0003828836 UniRef90\_A5ER32 UniRef90\_UPI00037CA7C7 UniRef90\_Q2RUJ8 UniRef90\_UPI000329AEE8 UniRef90\_UPI00037841BD UniRef90\_UPI000347AF01 UniRef90\_UPI000316897D UniRef90\_UPI0003B4668F UniRef90\_G3IVE6 UniRef90\_F7NL65 UniRef90\_S6BEK2 UniRef90\_W6MOQ4 UniRef90\_K9V7M0 UniRef90\_UPI000363224C UniRef90\_D8GPV0 UniRef90\_UPI0002E65A64 UniRef90\_Q8PIM5 UniRef90\_G7FPK5 UniRef90\_A3DDL3 UniRef90\_Y0KNB8 UniRef90\_UPI0003123C83 UniRef90\_U5MRK2 UniRef90\_UPI0004756BA7 UniRef90\_UPI000369FD8C UniRef90\_A0A017RVF9 UniRef90\_UPI00037F46D1 UniRef90\_Q0HIF6 UniRef90\_I3YG24 UniRef90\_C9YEI3 UniRef90\_K8WBI2 UniRef90\_R6M6S7 UniRef90\_HOTA47 UniRef90\_E1R3P4 UniRef90\_UPI00047B844B UniRef90\_A3DCP8 UniRef90\_A0A023SB03 UniRef90\_R4YL51 UniRef90\_UPI00035EE08D UniRef90\_E4U252 UniRef90\_UPI0004764001 UniRef90\_M1MKA0 UniRef90\_F3KCZ1 UniRef90\_U1J9S0 UniRef90\_A0A023DC73 UniRef90\_UPI000374D511 UniRef90\_UPI0002DD247 UniRef90\_UPI000469783C UniRef90\_D5XFF0 UniRef90\_A0A011QHC8 UniRef90\_D9SEV9 UniRef90\_W6N8B7 UniRef90\_C4XM23 UniRef90\_H4F1D2 UniRef90\_UPI00047AEB4A UniRef90\_UPI000468EA31 UniRef90\_W9V931

90 100 110 120

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



QUERY	130	140	150	160
UniRef90_E8WUF0	G R N A V G V I L T G M G N D G A A G M Q E M H N A G A R T L A Q Q N D E A S C C V V			
UniRef90_D3VC27	G R N A V G V I L T G M G N D D G A A G L L L E M K K E A G A G A N T L A A Q Q D E E A S C C V V			
UniRef90_Q1PXP9	G K N A I G M I L T G M G R D D G A E G L L L R M K K Q A G A G A Y T F A A Q Q D D E A S C C V V			
UniRef90_C5CXQ9	G K N A I G M I L T G M G R D D G A E G L L L R M K K Q A G A G A Y T F A A Q Q D D E A S C C V V			
UniRef90_UPI00037E490A	G P N I G V I L T G M G K D D G A K G Q G M L E M K K D A G A G A M N I A A Q Q D D E A S C C V V			
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UniRef90_F4LKU6	G K N A V G V I L T G M G D D D G A K G M K E M H D T G A W T I A A Q Q D D E A S C C V V			
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J 0 U V 7 6 F S T L K A I V I G G T S T G G G P K T L L Q T V F A G I L T P A D F P P I F V V Q H M  
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F 8 J B 0 0 P P T F T R S F A M R L L D R O Q S A P L E V V R E A K D G D L I R E G V V L I A P  
W 9 D P M 9 P A G F T A S L A Q R R L L D G Q S A L T V T E A K E T G D V L Q P G H A Y I A P  
B 4 V N S 6 P P V F T T R L A E R L L K A Q K S E I K E V V E A E G Y T L G Q L I R E G V V L I A P  
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UniRef90\_Q39T95 F G M P R E A I A T G V V D K V V P L D L I A R E I R M R C  
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UniRef90\_UPI0004792473 F G M P K Q A I A K G A I C E L V N L D S L A K R I V Q F A E G  
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UniRef90_B0TDV2																																											
UniRef90_W4NG62	A	N	F	P	I	V	L	G	I	G	A	S	A	G	G	L	R	A	L	L	Q	V	L	A	E	F	P	A	D	K	N	L	A	V	F	V	V	Q	H	L			
UniRef90_T0CAB9	F	S	G	S	Q	L	I	T	I	G	A	S	T	G	G	T	E	A	L	L	Q	V	L	A	E	F	P	K	E	F	P	P	L	V	I	V	Q	H	L				
UniRef90_M5DTM6	L	S	K	T	E	L	I	I	I	G	A	S	T	G	G	P	A	A	F	E	V	L	F	F	K	A	L	P	A	T	D	S	K	P	L	I	V	Q	H	L			
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UniRef90_H2BW74	L	N	K	F	P	V	V	G	I	G	A	S	A	G	G	L	E	A	L	L	E	L	F	F	D	A	N	R	V	E	C	M	A	F	V	L	V	Q	H	L			
UniRef90_G4QJL1																																											
UniRef90_UPI0003808867																																											
UniRef90_F6BLC5																																											
UniRef90_H8MTV3	N	K	N	L	V	I	V	I	G	G	V	S	T	G	G	P	K	T	L	M	E	L	L	E	P	Y	L	P	S	D	F	P	V	V	V	Q	H	L					
UniRef90_R9MRW5	P	Q	V	I	A	V	G	I	G	A	S	T	G	G	P	P	A	V	Q	R	L	L	E	L	P	G	L	A	V	E	P	T	V	S	V	L	V	Q	H	L			
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UniRef90_F8GCT1	T	D	T	F	P	I	V	G	I	G	A	S	A	G	G	L	N	A	F	T	Q	L	L	K	S	L	P	A	S	I	Q	A	V	L	V	Q	H	L					
UniRef90_F2KP61																																											
UniRef90_W5S8J4																																											
UniRef90_D8PFM8																																											
UniRef90_T2GDR3	T	T	A	C	K	L	V	G	L	G	A	S	A	G	G	L	E	A	L	L	E	E	F	F	Q	H	I	P	A	P	G	C	P	F	V	L	V	Q	H	L			
UniRef90_D1B6A1																																											
UniRef90_E0U9A0																																											
UniRef90_UPI00047AD330	N	S	F	P	V	L	V	G	I	G	A	S	A	G	G	L	D	A	F	K	K	L	L	K	A	L	P	E	S	S	M	A	Y	V	L	V	Q	H	L				
UniRef90_M5P4C0	S	A	K	L	V	G	I	G	A	S	T	G	G	P	K	A	L	Q	R	V	L	P	K	L	P	K	L	P	K	T	L	K	A	V	F	V	V	Q	H	L			
UniRef90_C9QGB9																																											
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UniRef90_D2Z3J7	P	K	L	V	C	L	G	A	S	T	G	G	P	Q	A	L	L	Q	R	L	T	A	L	P	S	D	F	P	I	I	V	A	Q	H	L								
UniRef90_O83639																																											
UniRef90_A6C6G2	T	P	M	V	M	V	V	G	I	G	A	S	T	G	G	P	S	A	L	R	H	I	F	A	Q	L	P	A	D	D	L	Q	P	V	V	V	Q	H	L				
UniRef90_W0RA90	A	A	G	P	V	L	A	I	G	A	S	T	G	G	T	R	A	I	K	E	S	V	L	A	A	L	P	E	A	D	A	P	G	T	V	I	Q	H	L				
UniRef90_F0LZ29	T	R	I	Q	L	L	A	I	G	A	S	T	G	G	T	E	A	V	K	S	V	L	S	A	L	P	A	T	L	P	P	I	V	I	T	Q	H	L					
UniRef90_K2JZE1	S	R	Y	Q	L	F	A	I	G	A	S	A	G	G	L	D	A	L	Q	N	F	L	D	N	L	P	A	N	F	Y	P	I	V	M	V	Q	H	L					
UniRef90_UPI0003090979																																											
UniRef90_W0DU37																																											
UniRef90_W5W1M2	P	Y	R	I	V	A	L	A	S	A	S	A	G	G	L	D	A	L	E	K	F	F	A	A	C	P	T	D	T	G	P	F	I	V	I	Q	H	L					
UniRef90_E4U2P2	L	P	A	S	K	R	I	V	A	I	G	A	S	T	G	G	V	T	Q	V	I	L	V	G	H	L	K	V	N	H	P	A	L	V	I	T	Q	H	L				
UniRef90_H8Z5X7																																											
UniRef90_UPI0003482D9B	N	H	L	V	A	I	G	A	S	T	G	G	T	E	A	L	K	E	V	I	T	R	L	P	E	R	S	G	A	A	Y	V	V	Q	H	L							
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UniRef90_G7ZEE0	M	D	K	R	D	I	L	A	I	G	A	S	A	G	G	L	P	A	L	Q	R	L	F	G	G	M	P	K	G	F	T	P	V	F	V	V	Q	H	L				
UniRef90_F9U5D5	Y	P	I	V	G	I	G	A	S	A	G	G	L	D	A	F	R	S	L	H	H	L	P	R	T	G	M	A	F	A	L	I	Q	H	L								
UniRef90_H2CF93	F	D	L	V	L	I	G	S	T	G	G	P	Q	C	L	H	R	I	F	R	R	L	P	A	G	F	P	I	C	V	V	Q	H	L									
UniRef90_S6A163																																											
UniRef90_K9WYX9	F	P	I	V	G	I	G	A	S	A	G	G	L	E	A	L	T	E	L	L	K	G	Y	L	H	T	D	T	M	A	F	V	L	Q	H	L							
UniRef90_A3UFA7	R	P	S	L	I	A	I	G	S	T	G	G	P	Q	A	L	R	D	V	I	G	A	L	P	R	D	T	N	P	I	V	I	T	Q	H	L							
UniRef90_Q21G20	L	K	T	G	F	L	C	A	I	G	A	S	T	G	G	T	E	A	I	K	A	V	V	S	S	L	P	L	N	S	P	P	I	V	V	T	Q	H	L				
UniRef90_D5VS86																																											
UniRef90_W5X836	M	G	K	E	R	I	L	A	I	G	A	S	A	G	G	L	V	E	A	L	L	S	R	L	V	A	K	L	P	N	D	L	N	A	V	L	V	L	H	L			
UniRef90_W8R472	F	P	V	V	G	I	G	A	S	A	G	G	L	K	A	L	I	T	F	F	E	N	M	P	N	D	C	M	A	F	V	V	I	M	H	L							
UniRef90_R7HU73																																											
UniRef90_F8JDQ4	F	P	L	V	G	I	G	A	S	A	G	G	L	E	A	L	C	H	Q	V	I	P	K	L	P	P	N	L	A	A	P	M	I	V	Q	H	L						
UniRef90_H6L0Z5	P	Y	E	M	L	L	L	G	A	S	T	G	G	P	A	T	L	E	F	I	L	L	A	Q	L	P	E	N	W	P	P	L	V	I	A	Q	H	L					
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P S D G V S F L R D V L A R S S N M P V N V A A V D G G R Y H L G T C Y I G E P D  
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UniRef90\_UPI000371A416 G G R V L A V I L L T T G M G H D G L A A G C R G L T A Q G G A V I A Q Q D E A T S V V  
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UniRef90\_B2JPY8 R E R L I G V V L L S G A N D D G A Q G L K Q V I R A M G G L A W V Q Q D P Q A T A V S  
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UniRef90\_UPI0002D3D561 G G G V L A I L L T T G A S S D G S D G V A A V R Q A G G E A W I Q C P E E A Y S  
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UniRef90\_W5SML3 K E K A I A L I M T T G M G S D G S R E I G E I K K A Q D E T I A Q D E K S S L V  
UniRef90\_J4TG92 G P R S V A V V L S G S G H D G A A G T V A M K R A G A I V I A Q S P E S A Q Y  
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UniRef90\_A0L7P6 G S R V V G V I L L T T G M G R D G V G G L A A V C A Q A G G K T L A Q Q D E A S V I  
UniRef90\_X5RV55 P S D L I G I L L M T G M G N D G A S A M K L L H E R G G T T I A E A E E T A V V  
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UniRef90\_S6PEH8 S G E A V G V L L T T G M G R D G A Q G L K A M R E R G F L T I A Q Q D Q A S S A V  
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UniRef90\_UPI0003A9B3EB G A G A A G I V L L T T G M G R D G T V G A R D V V A A H G W I V A Q Q D E A S S V V  
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	170	180	190
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UniRef90_Q1I8R4	R A M P E A A I A A C P Q A R V L S L Q N I S S Y L L		
UniRef90_B9K3H1	G M P R S A I D T G L I D R V L A L E D I P A A L A D R		
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UniRef90_W2DES7	Y G M P K A A A E L K A A V E I L P L D A I A P A L I K		
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UniRef90_A9AKW2	P S M V E S A L Q Y V E V D H C V P		
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UniRef90_V6SRA6	D G M P V S A I I K D D P D G I L S P R T L A Y A L L T D Y L		
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UniRef90_F4CNP9	R T M P K A A R Q A C N A A L V L P L D R I A D Y L		
UniRef90_L1QGS4	D T M P Q S G I L E S N T S T I L K N Q E I R Y F S H		
UniRef90_U2J6I3	F G M P G A A I Q N G A A R L V L P L G Q I A P A L E R L A H G E S		
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UniRef90_S3HUE1	W G M P G A V A Q A G I A S A I V P V G D I A R E I M T M T R S		
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UniRef90_G8SK52	P T M P R A A A L G A A D E V L S P T L M A R R L A G L		
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UniRef90_UPI0002D3D561	Y G M P K A A A L D A A C E I L P L G D L A P R L E K V F A		
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UniRef90_W5SML3	P S M P I A A A Q A G A D L V L D V G E T G G V L T G I I G G A		
UniRef90_J4TG92	G D M P R S V I E A G L A A E V L P A A A L G R Q L A R L L S A		
UniRef90_I2Q4S9	F G M N K L A I E A G V A Q E V S L D N M L P A M L K H A Q Q S S A		
UniRef90_A0L7P6	W G M P G E L V K G G G A D W I L P L P E T A R Q L M K V V		
UniRef90_X5RV55	R V M P D A A R N A G N Y D Y L M K L P A I A		
UniRef90_U1B7N6	S S M P D S V V A T G H V S Y I G S P R Q L A S Q L V N Y L Q		
UniRef90_R4YJA1	Y G M P K		
UniRef90_S6PEH8	S E A P E A V I A L D A A S K E V P L D A L G A A V L G R C S		
UniRef90_F1Z7Q2	A S Q P Q S M I E S N Q V T F V G T P K Q L A E Q L I A L C		
UniRef90_C8PVN5	Y G M P K A A A I G A A S A I L P L D R I A P Q L I A R V M G P		
UniRef90_UPI00016A6A4E	Y G M P K A A A E A G A S E I L P L P T I A P Q L V A L F		
UniRef90_V5PYC3	Y G M P K A A A L G A A S E I L P L P Q I A P R L I R A C		
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UniRef90_UPI0003A9B3EB	S S M P D N L R E G G Y S S F T G D P R E L A Q A L V N H L A		
UniRef90_K5YAR1	Y G M P K A A A I D A A S A I L P L D Q I A E R V L Q R F A R S R		
UniRef90_F2LQE6	Y G M P R S A I A K V V D V L P L E K I A E A I M K F I S		
UniRef90_F7Z435	P G M P T A A L H R V P D A A V W P A A K L G R A I T D L D A A R		
UniRef90_G8SGA6	R G M P L N A T E Y G P V D F L G S I S D I A A E L V R R I A		
UniRef90_H5YIH0	P S M P E A L L K R V P H I P T G T P E H L A Q L M T Q V V R		
UniRef90_C9Q4S2	P A L P R S A I A A G V D F V L S V E E I A A E L V R M G R P G H V L		
UniRef90_A9FIU2	R S M P D A A R E T G G V S F S G K P S D L A R Q M		
UniRef90_UPI0003620BD1	S S M P D S V K A T G C T S F V G D P T Q L A R K L T Q T I		
UniRef90_N6X2W9	D S M S Q S V K A I G K I D F E G S P E K L G Q Q F M E Y L A A Q H A V		
UniRef90_Q21EJ6	E S M P K S V I D A K L A D E V L A V E N I A A S L V R F A S R K V V E R L		
UniRef90_B8KPY2	R A M P D A A L A R I D A P E V		
UniRef90_R4XQJ5	Y G M P K A A A A L G A A V E I L P L G A I A P R L V A A C A		
UniRef90_UPI0003638FA9	P S M P E S L R E S G L A T L T A D P R G L A E A L V A R L A E Q Q S		
UniRef90_H0JG50			
UniRef90_M6ZX85	Y G M N R V A V E Q G A V D R V L		
UniRef90_A4TTM8	S S M P Q S E L R E G G Y S T L S A D P R E L A A A L V N H L A A		
UniRef90_M4XA76	F G M P D E A I K L G A A R D L V L P M E T I A P Y I V K I L K S		
UniRef90_T2K0A1	S D M P R S A V S T G L A D D V Q P A P E L A A R L M G L		
UniRef90_H8H1H5	S V M P E A V A A E G L S R R Q G D P A E L A V A L Q A W L A		
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UniRef90_A5VGP7	S S M P D S V A A T G C V E F R G S P H Q L A E K L K T I		
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UniRef90_C7PKM6	G S M P E S A I G T G R V T F I G T P Y Q L A L Q L V Q S V		
UniRef90_M5DLP5	R G M P E N A I G S G P I D V I G S P Q		
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UniRef90_UPI00036FF38F	P D M P E S A I A S G C I D F V L S P E A I A Q E I V R		













