

| QUERY                  | 1 | 10 | 20 | 30 | 40 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------------|---|----|----|----|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UniRef90_I3ECW8        | M | K  | T  | N  | R  | R | T | E | S | G | Q | R | S | F | E | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |   |
| UniRef90_G4L679        | M | K  | G  | T  | F  | K | R | R | D | S | G | R | S | S | F | E | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_W4RJA3        | M | K  | R  | A  | T  | F | K | R | R | D | S | G | R | S | S | F | E | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_E3IFX5        | M | H  | V  | E  | I  | E | R | R | T | K | D | G | K | V | R | A | F | T | M | K | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_UPI000372A8D  | M | K  | V  | V  | N  | I | F | R | N | G | Q | N | G | V | R | S | F | T | M | K | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_UPI00037ED964 | M | K  | V  | V  | N  | I | F | R | N | G | Q | N | G | V | R | S | F | T | M | K | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_A6CTK8        | M | K  | V  | Y  | I  | T | K | D | P | G | G | R | V | S | S | F | S | M | D | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_W4QXC0        | M | T  | V  | E  | L  | R | Y | R | S | N | K | G | L | V | S | S | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_UPI0004797610 | M | N  | A  | R  | L  | Y | R | S | N | K | G | L | V | S | S | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_UPI00034A9671 | M | V  | V  | T  | F  | K | R | N | E | H | H | H | L | S | S | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_NOB3B5        | M | R  | I  | K  | I  | N | R | T | E | S | G | K | I | H | S | F | E | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_F7Z5N3        | M | R  | V  | R  | I  | K | R | K | K | N | G | N | I | H | S | F | E | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_S6A3A9        | M | R  | V  | T  | I  | E | R | E | A | G | G | R | V | R | A | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_U5LGI3        | M | H  | T  | T  | I  | T | R | E | A | G | K | H | V | S | S | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_UPI00040A8022 | M | R  | V  | S  | I  | E | R | D | E | N | K | H | V | S | S | S | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_G9QQ55        | M | N  | V  | V  | I  | E | K | D | R | S | G | K | I | R | S | S | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_UPI00031246A2 | M | E  | V  | I  | E  | Q | R | N | S | N | G | T | I | K | K | G | F | Q | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_UPI0003F94EE5 | M | Q  | A  | T  | I  | T | R | S | N | K | I | V | S | S | S | F | F | E | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_I8UET5        | M | K  | V  | T  | V  | Q | R | D | D | R | G | R | I | S | S | S | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_K6DA41        | M | K  | V  | I  | T  | R | R | D | A | H | S | H | S | H | S | F | E | N | L | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_F5LAN9        | M | N  | I  | H  | I  | T | R | D | Q | N | G | A | I | D | A | F | N | L | H | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_UPI0003634E1C | M | Y  | V  | N  | V  | K | K | D | Q | F | G | F | I | S | S | S | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_W1SKB9        | M | G  | I  | T  | I  | T | R | T | K | S | G | M | I | Q | A | F | F | E | I | V | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |
| UniRef90_UPI00037C6439 | M | K  | V  | T  | V  | H | Q | S | E | R | G | E | I | A | A | F | T | V | E | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_E6SKC7        | M | R  | A  | V  | F  | Y | R | D | G | Q | G | A | I | T | R | F | E | I | T | T | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_UPI0001E8996B | M | K  | V  | T  | I  | K | R | R | D | D | Y | K | L | Q | S | F | T | I | T | T | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_V9GDR6        | M | T  | V  | Q  | V  | R | R | R | D | E | N | G | L | H | S | S | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_S4DHP3        | M | K  | G  | T  | F  | K | R | N | D | A | G | Q | I | V | S | S | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_Q9K8J6        | M | D  | V  | V  | F  | E | R | N | K | Q | N | D | I | V | S | S | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_UPI000478AA49 | M | K  | I  | S  | L  | V | R | N | R | R | G | H | I | V | A | R | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_UPI0002EF9C09 | M | V  | K  | V  | L  | S | R | N | E | A | G | H | I | T | S | F | E | I | S | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_UPI00040A17C3 | M | T  | I  | T  | I  | V | R | G | Q | D | G | R | I | R | Q | F | S | V | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_UPI0003120F3A | M | T  | V  | K  | F  | D | Y | K | Q | D | G | R | I | A | S | F | T | M | N | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_D5DLJ4        | M | K  | V  | T  | I  | S | R | D | A | N | K | K | V | D | G | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_D6XT39        | M | K  | V  | H  | F  | E | R | Q | A | D | S | T | I | R | A | F | T | M | N | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_R9GBK1        | M | K  | A  | D  | F  | I | V | N | A | D | S | Q | I | L | S | F | Q | I | T | T | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_UPI0003816961 | M | F  | V  | K  | I  | Q | D | D | K | G | K | I | A | S | S | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_UPI000374C78E | M | V  | I  | V  | R  | I | E | R | H | E | D | G | I | D | D | G | F | S | S | R | T | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |
| UniRef90_W8QYF0        | M | K  | A  | T  | I  | T | R | S | A | D | E | S | I | T | S | F | Q | M | T | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_E6TYU1        | M | Q  | V  | V  | F  | E | R | N | D | N | S | I | H | T | F | T | M | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |   |
| UniRef90_UPI00046EC9B2 | M | D  | V  | R  | I  | H | R | K | A | S | D | G | N | L | S | F | K | M | K | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_UPI00036ED1F0 | M | Q  | V  | H  | I  | K | R | A | A | D | G | K | I | L | A | F | K | M | K | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_UPI00021918D4 | M | Q  | A  | Q  | F  | E | R | D | Q | A | G | V | I | H | Y | F | R | L | T | T | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |
| UniRef90_UPI0001850824 | M | H  | V  | Y  | V  | T | K | S | G | G | K | I | V | Q | Q | G | F | S | M | D | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |
| UniRef90_UPI0004213940 | M | E  | V  | T  | V  | T | R | K | E | N | S | I | V | V | A | F | E | L | S | G | H | A | E | S | G | E | Y | G | N | D | V | V | C | A | S | V | S | T | A | V |   |   |
| UniRef90_R9WK55        | M | R  | A  | Q  | F  | T | L | D | S | N | Q | R |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |



| QUERY                  | 90                             | 100          | 110  |
|------------------------|--------------------------------|--------------|------|
| UniRef90_I3ECW8        | RQEKVQQLLEIEGMVVVSLGQQNTLSE    | RDYGGKHHKQIT | RVIT |
| UniRef90_G4L679        | SNLIVQQLLEENLQLLGMQQSVMQEQEY   | NGNDYVQVLL   | ET   |
| UniRef90_W4RJA3        | QEKIVQQLLEESMVIITLQQSMEKKEYG   | KKHHVQVLL    |      |
| UniRef90_E3IFX5        | AEKVQQLLEESAMLVSLQQTITIERDYG   | GGKYYIRKVV   |      |
| UniRef90_UPI000372A8D  | FRKAVQQLLEEGMIVSLQKTIIEERDYG   | GGKYYQVQV    | NE   |
| UniRef90_UPI00037ED964 | NDQVQQLLEEGMIVVALQKSTIIEERDYG  | GGKHHVQV     | KETT |
| UniRef90_A6CTK8        | EEKVQQLLVQGMIVSLQKSTIIEERDYG   | GGKFFVQV     | KI   |
| UniRef90_W4QXC0        | FEEKVQQLLEEGMLVSLQKSTIIEERDYG  | GGKYYQVQV    | NDI  |
| UniRef90_UPI0004797610 | SEERVQQLLEEGMIVSLQKSTIIEERDYG  | GGKYYISVV    |      |
| UniRef90_UPI00034A9671 | FEKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKHHVQV     | E    |
| UniRef90_NOB3B5        | QAKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKHHVQV     |      |
| UniRef90_F7Z5N3        | AQKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKFFIRIV    |      |
| UniRef90_S6A3A9        | AQKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKFFIRIV    |      |
| UniRef90_U5LG13        | QEKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   |      |
| UniRef90_UPI00040A8022 | FEKVQQLLEEGMLVSLQKSTIIEERDYG   | GGKHHVQV     |      |
| UniRef90_G9QQ55        | LEKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKFFIRIV    |      |
| UniRef90_UPI00031246A2 | LNKAVQQLLEEGMIVSLQKSTIIEERDYG  | GGKYYIRKVV   |      |
| UniRef90_UPI0003F94EE5 | LKKAQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | TTKN |
| UniRef90_I8UET5        | DEKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKFFIRIV    | QE   |
| UniRef90_K6DA41        | NEKVQQLLEEGMLVSLQKSTIIEERDYG   | GGKYYIRKVV   | NT   |
| UniRef90_F5LAN9        | QEKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | TV   |
| UniRef90_UPI0003634E1C | REKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | N    |
| UniRef90_W1SKB9        | NEKIQQLLEEGMIVSLQKSTIIEERDYG   | GGKHHVQV     |      |
| UniRef90_UPI00037C6439 | RPEVDLLEKAMVSLQKSTIIEERDYG     | GGKYYIRKVV   | EE   |
| UniRef90_E6SKC7        | HRAAQQLLEETARVSLQKSTIIEERDYG   | GGKYYIRKVV   | EE   |
| UniRef90_UPI0001E8996B | SEKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | EE   |
| UniRef90_V9GDR6        | SDQVQQLLEESMVMVSLQKSTIIEERDYG  | GGKYYIRKVV   | QELT |
| UniRef90_S4DHP3        | NNIAQQLLEENLQLLGVQSSIEVEHSEY   | IRKVV        | ET   |
| UniRef90_Q9K8J6        | FEKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKHHVQV     | EE   |
| UniRef90_UPI000478AA49 | NAQVQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | K    |
| UniRef90_UPI0002EF9C09 | ARNVQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | NI   |
| UniRef90_UPI00040A17C3 | NDRVQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | RI   |
| UniRef90_UPI0003120F3A | QDKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | NI   |
| UniRef90_D5DLJ4        | LEQIQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | NI   |
| UniRef90_D6XT39        | GKKVQQLLEEGMLVSLQKSTIIEERDYG   | GGKYYIRKVV   | TDVN |
| UniRef90_R9GBK1        | LATAQQLLEENLQLLGLVQSSIEVEHSEY  | IRKVV        | QT   |
| UniRef90_UPI0003816961 | SERTVQQLLEEGMIVSLQKSTIIEERDYG  | GGKYYIRKVV   | NI   |
| UniRef90_UPI000374C78E | FEEKVQQLLEEGMIVSLQKSTIIEERDYG  | GGKYYIRKVV   | KQVT |
| UniRef90_W8QYF0        | KKAQQLLEEGMIVSLQKSTIIEERDYG    | GGKHHVQV     |      |
| UniRef90_E6TYU1        | YEKVQQLLEEGMLVSLQKSTIIEERDYG   | GGKFFIRIV    |      |
| UniRef90_UPI00046EC9B2 | NDKIVQQLLEEGMIVSLQKSTIIEERDYG  | GGKYYIRKVV   |      |
| UniRef90_UPI00036ED1F0 | DEKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKHHVQV     |      |
| UniRef90_UPI00021918D4 | AKTAVQQLLEENLQLLGLVQSSIEVEHSEY | IRKVV        | NK   |
| UniRef90_UPI0001850824 | EQTAVQQLLEEGMIVSLQKSTIIEERDYG  | GGKHHVQV     |      |
| UniRef90_UPI0004213940 | QEKAVQQLLEEGMIVSLQKSTIIEERDYG  | GGKYYIRKVV   | TI   |
| UniRef90_R9WK55        | GHDSTQLLKTLLNGLCDLQESYPQNI     | IEV          | KM   |
| UniRef90_D3FW81        | YEKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | NI   |
| UniRef90_UPI0003118676 | LEKASLLEEGMIVSLQKSTIIEERDYG    | GGKYYIRKVV   | SI   |
| UniRef90_UPI000289A42F | EKVQQLLEEGMIVSLQKSTIIEERDYG    | GGKYYIRKVV   | SI   |
| UniRef90_C4L4N2        | MERTQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | SI   |
| UniRef90_L5N526        | HSAQQLLEEGMIVSLQKSTIIEERDYG    | GGKYYIRKVV   | SI   |
| UniRef90_UPI0004027B1B | SDKIQQLLEESTMLVSLQKSTIIEERDYG  | GGKYYIRKVV   | SI   |
| UniRef90_G8PDK1        | DEQIQQLLEKSLRLGLVQSSIEVEHSEY   | IRKVV        | K    |
| UniRef90_UPI0002895FAD | LGRARLLEAMVSLQKSTIIEERDYG      | GGKYYIRKVV   | HI   |
| UniRef90_UPI0004225C43 | WSQVQQLLEESMVLMLTDIAESYGGKY    | IRKVV        | EQV  |
| UniRef90_D7CLA1        | MEKAVQQLLEEGMLVSLQKSTIIEERDYG  | GGKYYIRKVV   | HI   |
| UniRef90_Q2RL01        | ARTARVILRTLEEVGLNTIIEERDYG     | GGKYYIRKVV   | HI   |
| UniRef90_UPI0002D97A07 | NEQVQQLLVQAMITVSLQKSTIIEERDYG  | GGKHHVQV     |      |
| UniRef90_UPI000424465B | SGEVQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_G7VT06        | NAQVQQLLEESMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_B7IIV5        | VEKAVQQLLEEGMLVSLQKSTIIEERDYG  | GGKYYIRKVV   | HI   |
| UniRef90_UPI00046F1AE8 | REKAVQQLLEEGMLVSLQKSTIIEERDYG  | GGKYYIRKVV   | HI   |
| UniRef90_B0TBW6        | AQTAVQQLLEETMVLGLQSSIEVEHSEY   | IRKVV        | HI   |
| UniRef90_H3SF92        | EAVQQLLEESMIVSLQKSTIIEERDYG    | GGKYYIRKVV   | HI   |
| UniRef90_W4QHM4        | FEKIQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_UPI000225BE88 | MERAVQQLLEEGMIVSLQKSTIIEERDYG  | GGKYYIRKVV   | HI   |
| UniRef90_UPI0003721323 | SQNAQQLLEEFALLGMNNSDNASDFV     | KTT          | QVI  |
| UniRef90_I0JPD2        | YAKSQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_I0BRN4        | NEKVQQLLEESMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_UPI0003FE066D | VQKIQQLLEEGMLVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_ROGGU4        | EQKAVQQLLEASFEELGLRDSKTYDKEY   | L            |      |
| UniRef90_Q03G00        | NRMAGVQLLEALGLRDSKTYDKEY       | L            |      |
| UniRef90_I4X897        | DEQVQQLLVRAMITVSLQKSTIIEERDYG  | GGKYYIRKVV   | HI   |
| UniRef90_W7YZG7        | QKQVQQLLEESMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_W4C8F8        | SAKVQQLLEESMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_UPI00037E3082 | GEQAVQQLLEASLVMLKGIQESYGGKY    | IRKVV        | HI   |
| UniRef90_E5WJ27        | NEKVQQLLEEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_UPI000289BBD8 | EKIQQLLEAMVSLQKSTIIEERDYG      | GGKYYIRKVV   | HI   |
| UniRef90_C2EW64        | AHDAQVIMQTFFNGLMNDIAESYPQNI    | IEI          | KM   |
| UniRef90_W9AGD4        | EQVQQLLEEGMIVSLQKSTIIEERDYG    | GGKYYIRKVV   | HI   |
| UniRef90_A0A011RMA1    | METAQQLLEKSLVSLQKSTIIEERDYG    | GGKYYIRKVV   | HI   |
| UniRef90_UPI0002196EE9 | DVKVQQLLKSFMNGLKDTISKQYSNY     | VEV          | K    |
| UniRef90_R6I7C3        | NELTQALATMEYGLSDIAESYPKYY      | IRKVV        | HT   |
| UniRef90_UPI00038177DF | SAKVQQLLEESMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_UPI00037D509E | SGQVQQLLEESMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_UPI000255BFFD | LEKARLLEAMLISMRITIEQSSYGGKY    | IRKVV        | HI   |
| UniRef90_L0EFQ5        | DDKVQQLLEESMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_W0EAK9        | LEQAVQQLKTMVSLQKSTIIEERDYG     | GGKYYIRKVV   | HI   |
| UniRef90_UPI0003644821 | HEEVQQLLVEGMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_X5A2E9        | AAKVQQLLEESMIVSLQKSTIIEERDYG   | GGKYYIRKVV   | HI   |
| UniRef90_C9A7A1        | SNIQQLLEENLQLLGLVQSSIEVEHSEY   | IRKVV        | K    |

UniRef90\_L7VLM4 1 MI K A V I Y H N K D G K I K G F V K V K G H A G S F G T A G G N D 30 I V C A A V S A V 40

UniRef90\_UPI0004211BF2 MI R V T V F R T K Q N N G E R N I T A F E L S G G H A D S G P Y G G Y D L V C A A V S A V

UniRef90\_UPI00047E29C3 MI Q V A V Y R K Q N N G E R N I T A F E L S G G H A D S G P Y G G Y D L V C A A V S A V

UniRef90\_G5KFB9 MI K A T F T R D N S N G H L V T S G F E I T T G H A D S G G E Y G G F D I V C A A V S A V

UniRef90\_UPI0002490FAF MI K A V F V H N N S N R L V T S G F E I T T G H A D S G G E Y G G F D I V C A A V S A V

UniRef90\_B9DU55 MI K A I F T R D K D G S L V T S G F A K L T G H A D S G G E Y G G F D I V C A A V S A V

UniRef90\_UPI0003714B6F MI K T R F L Y N D N A F C G S A K L L K G H A D S G G E Y G G F D I V C A A V S A V

UniRef90\_UPI000466F27F MI Q A T V H Y G S D R I N S F R L I T G H A N S G G E Y G G Q D I V C A A V S A V

UniRef90\_XOR585 MI T V K V N R N G D Q K K I V S F S M S E G H A E Y A G D D P P A G G E D I V C A A V S A V

UniRef90\_UPI000369D309 MI N V T I R R R G Q D N D G K I V S F R F R V E S G H A E Y A G D D P P A G G E D I V C A A V S A V

UniRef90\_R5A9N6 MI K A R I Y R K N Q Q K I C G F F E I S E G H A G Y A Q A G G E D I V C A A V S A V

UniRef90\_UPI00037FAD42 MI N V T I E R E Q N T Y I K S F T L T S G H A D S G P P E G G H D L V C A A V S A V

UniRef90\_Q8EPP7 MI K V T V F Q T E N N Q I T A F E L T S G H A D S G P P E G G H D L V C A A V S A V

UniRef90\_V6J0S8 MI L L T V R R D H Y G K I F A F K L T T G H A D S G P P Y G G Q D L V C A A V S A V

UniRef90\_UPI00046AA3DF MI K A S F H Q D D K Q Q R I D S F L I T T G H A D S G P P Y G G Q D L V C A A V S A V

UniRef90\_B8FUS2 MI T L N L W L Q D N D Q R I R K F E L C G H A G Y A E Y G G Q D L V C A A V S A V

UniRef90\_R9C848 MI E L T I D K S N D G L I H A F T I S G H A L F A N S Y G G N D I V C A A V S A V

UniRef90\_I9L1I2 MI Q A T I S R N A T G Q Q L T S A F K L T T G H A D S G A Y G G F D I V C A A V S A V

UniRef90\_E7PVR9 MI K A I F T R P K N G Q Q I T S S V T T G H A G S G K H G G F D I V C A A V S A V

UniRef90\_Q8RBA8 MI E V K V W R N P Q Q G D I Y K F Y V K G H A G Y D E Y G K D I V C A A V S A V

UniRef90\_F5SAK5 MI R L S L Y R D G G G L E R V L L R G H A G F G E A G G S D I V C A A V S A V

UniRef90\_V6Q5U3 MI Y C R F K R D K Q Q T I T M L E V S G H A N A G P Y G S D I V C A A V S A V

UniRef90\_UPI00047B2155 MI I V Q V K R L D T K E I A S F S M E G H A N A G P Y G S D I V C A A V S A V

UniRef90\_L0KCT2 MI T V K I E R N K D S N N I L A F W A Q G H A E Y A G D D P P A G G E D I V C A A V S A V

UniRef90\_J3JP51 MI K A I F I R N K D S G S L V S A K L T T G H A G S G E Y G G F D I V C A A V S A V

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UniRef90\_UPI0004069B82 MT R I T I E R L K K D G R I S G S F K I L S G H A F F S D A G T D L V C A A V S A V

UniRef90\_F9DV13 MI H V R I T K E P S G G R I S S F E M D G H A E F A E H G K D L V C A A V S A V

UniRef90\_UPI0003B368E5 MI T C H F V R E D G L F L G F T C K G H A D F S E Y G S D I V C A A V S A V

UniRef90\_XOPRE1 MI T A S F Y R D R E G N L N H Y R I T T G H A N S G V Y G G Q D L V C A A V S A V

UniRef90\_U6BEM2 MI R V K I R R R D E A E L V R S I E V T T G H A E F A E P G G L D L V C A A V S A V

UniRef90\_UPI0002626C3A MI N V I I K R Q E S Q I K Q F E L S G H A A S G P Y G G Y D L V C A A V S A V

UniRef90\_UPI00037CBDE6 MI Q A T F I R S Q Q R L V S F A L T S G H A G S G E F F G Y D I V C A A V S A V

UniRef90\_E0IDW0 MI T V T F V R S A N R R I V S F A V T S G H A D Y A K R G R D I V C A A V S A V

UniRef90\_UPI00046A5CDA MI R V K F L Y Q N D C L L G F D M Q G H A G A G E Y G G F D I V C A A V S A V

UniRef90\_R2PR93 MI I G T F K R N D N S G R I S I S F E L T S G H A E Y D E Y G K D L V C A A V S A V

UniRef90\_UPI000315588A MI T V T L H H D N S R R V S A F E F S G H A E Y D E Y G K D L V C A A V S A V

UniRef90\_R5QQN7 MT T V T I Y Q T K N G I Y K G F E L S G H A G Y A K N G A D I V C A A V S A V

UniRef90\_UPI0003638DD9 MI R L K I T R N S D R S L E S F S I N G H A N S Y A K H G F D I V C A A V S A V

UniRef90\_UPI00037F935D MI K A I F T R R Q S G Q L E G V L S G H A G S G E F F G G F D I V C A A V S A V

UniRef90\_UPI00024926B1 MI K A H F L S N N D T F C G F L L K G H A D S G E F F G Y D I V C A A V S A V

UniRef90\_D4J8G0 MI S V T V Y K R D K N N H Y T G F R L C D G H A E Y A E P G G E D I V C A A V S A V

UniRef90\_U4TQ29 MI K A D F Y R D P D N G N I T R F T L T G H A G S G P Y G G Y D I V C A A V S A V

UniRef90\_H5SP72 MT S V E I L R D A D G K I C G E F R S R G H T G Y A E A G G R D L V C A A V S A V

UniRef90\_N1ZE28 MI K A T I Y H N S R K K Q L C G G Y C I T S G H A G F A Q K G G Q D I V C A A V S A V

UniRef90\_A8MHL0 MI S I S I Y R N R K K Q L E Q F I V T T G H A Y A E A K G G Q D I V C A A V S A V

UniRef90\_N4WUD5 MI Q V L I E R K N H D I T A Y T V K G H A D S G P Y G H D L V C A A V S A V

UniRef90\_R4RIV9 MI R V S F T V T P D Q K K I T S F K M T G H A E S G P D G Q D I V C A A V S A V

UniRef90\_UPI000471D769 MI R V A I T R G P G R R I E R F T V D G H A Q Y D E P D G G Q D I V C A A V S A V

UniRef90\_R5TP05 MI K V T V F E D S D R V V R G F K L T T G H A G Y G E E G Q D I V C A A V S A V

UniRef90\_N1ZQL0 MI H A N I I R N G K V I E G F D I T T G H A G F A K A G G E D I V C A A V S A V

UniRef90\_S1RRU9 MI K G T F Y R T E S G T I H Q F R I T T G H A G A G E Y G G E D I V C A A V S A V

UniRef90\_W1Q263 MI K I K G Q V D T K G A L R Q L E L S G H A G A G E Y G G E D I V C A A V S A V

UniRef90\_UPI0002490541 MI K A I F F Q D Q N S N F S S F S I T T G H A E S G P Y G G Y D I V C A A V S A V

UniRef90\_A0A024Q3J8 MI H T T V Y R S N G D I T A F K L T T G H A Q S G P Y G G Y D I V C A A V S A V

UniRef90\_UPI000249156B MI K A S F H R N D D K K I D S L M I L G H A D S G P Y G G Q D I V C A A V S A V

UniRef90\_UPI0003602A7B MI N V S L R Y E D Q G G I H G V F K G H A Y F A K A G G E D I V C A A V S A V

UniRef90\_D0BNQ0 MI R V T F H K K D H E L V S F E M T G H A Y F G E Y G G E D I V C A A V S A V

UniRef90\_UPI000374735A MV I V Q I V R S P D G K I T G F S V K G H A G Y A D R G G E D I V C A A V S A V

UniRef90\_UPI00047CDDC2 MI S L L I E R N D K K E V S R F E I S G H A E S A E R G Q D I V C A A V S A V

UniRef90\_C6SR51 MI Q A T F I R R K G L L E S V E I T S G H A G S G E Y G G F D I V C A A V S A V

UniRef90\_UPI0002F4AE84 MI L A T V K R D G G D L E E I T I S G H A H A E A E Y G K D I V C A A V S A V

UniRef90\_R6P8K8 MI K V T I Y A K T E R Q E Y V F D M E T G H A G Y A E A G G E D I V C A A V S A V

UniRef90\_UPI00041F6BEF MI K V I I A R N S E S Q I T E F T M T G H A D Y D V H G K D L V C A A V S A V

UniRef90\_UPI00037B948C MI I V H I K H T E N G S I A G F S V K G H A N Y A K S G G E D I V C A A V S A V

UniRef90\_H4GEJ3 MI R A T F W L T D D Q R V I Y G F K L T T G H A D A G P Y G G Q D I V C A A V S A V

UniRef90\_UPI000479CA1B MI K V M I K R S D S G R P Y G F R I T S G H A G Y S E S G T D I V C A A V S A V

UniRef90\_S0JJF9 MI K G T F K R N T S G R I V S Y E I S G H A N A G E Y G N D I V C A A V S A V

UniRef90\_D9S2A3 MI K A T V L D A R G R V R E L L I R G H A G Y A E A G G K D I V C A A V S A V

UniRef90\_E4KP37 MI N I Q I A S N H K G Q I Q S L E V S G H A G F A E A G G E D I V C A A V S A V

UniRef90\_F3ZYG0 MI S V K F Y K A E N G S I K G F S I E S G H A N Y G D E G G Q D I V C A A V S A V

UniRef90\_W9EKH1 MI K A Q Q K K T K Y G L S G F V I T T G H A D S A A Y G G Q D I V C A A V S A V

UniRef90\_J9YR19 MI K A T F T R N Q S G Y L S S A E I S G H A G S G E Y G G F D I V C A A V S A V

UniRef90\_UPI0004680E99 MI K I T I K R Q P D S R I L Q F T L H G H A G Y A D S G Q D I V C A A V S A V

UniRef90\_K8E3H3 MI Q A L F K R D E D G N L V S F E I T S G H A E S G P D G Q D I V C A A V S A V

UniRef90\_W8YGH2 MI E V T F R R S G D R H I T A F S V K G H A E S A K A G G K D I V C A A V S A V

UniRef90\_J0UR95 MI K A S F I Y K G N Q L V G F E L K G H A E S G E Y G Q D I V C A A V S A V

UniRef90\_W4V2X3 ML R V E I R D S N R F I R E L V T T G H A G Y E R R G K D I V C A A V S A V

UniRef90\_K0AYW7 MT N I K I F T D Q D G S I V Q Y E I S G H A D F D E Y G K D I V C A A V S A V

UniRef90\_U1YHC7 MI T V Q V K R R S D D T I E E I T I S G H A G S A E Y G Q D L V C A A V S A V

UniRef90\_V6MDI1 MV T V T V K R N R N G I E E L T I S G H A G H A G K E E G S D I V C A A V S A V

UniRef90\_E8LDZ5 MV S V D L F R N R Q G M T T G Y K V S G H A G Y S E E G S D I V C A A V S A V

UniRef90\_B9E723 MI N V T V L V N E D G Q V T E F T M E S G H A D S A P H G Q D L V C A A V S A V

UniRef90\_G2KW99 MI K A K F N S Q K N L I T G F T L S G H A D S G E Y G H D I V C A A V S A V

UniRef90\_F4LVZ4 MI R V R I K S H P F G G Y K S I E I S G H A E Y A D Y G K D I V C A A V S A V

UniRef90\_W3AG08 MI S V I V K R A D R R I V S F A I S G H A K Y A D R G K D I V C A A V S A V

UniRef90\_C6D803 MI E V I V S R A R H G I H E I S I S G H A N A G A Y G A D I V C A A V S A V

UniRef90\_C0ZAL4 MI Q V D V S D S K G C T T G I V S K G H A G Y D E Y G K D I V C A A V S A V

UniRef90\_R7B090 MI Q A I F K T D E K D Q F V S F E I S G H A F A G E Y G G Q D I V C A A V S A V

UniRef90\_D4YE03 MI R V T I Y K N E K H Q C V G F K A H G H A G F S E E G Q D I V C A A V S A V

UniRef90\_R6LSV4 MI R V T I Y K N E K H Q C V G F K A H G H A G F S E E G Q D I V C A A V S A V

UniRef90\_R2SZ11 MI K S S F K R N G A G Q I V S F E V S G H A E S G P Y G S D I V C A A V S A V

UniRef90\_L7VLM4 V Y T A L G G V D E L A G F R N F V I E Q G Q D E G G G Y L H C H V P D G L N E T E K  
UniRef90\_UPI0004211BF2 S I G T V N A V L M A L R L C E L D E P L I I E Q G Q D E G G G Y L H C H V P D G L N E T E K  
UniRef90\_UPI00047E29C3 S F G S I N A V L E I R L C C E L D E P L I I E Q G Q D E G G G Y L H C H V P D G L N E T E K  
UniRef90\_G5KFB9 A I N F V N S V L E I V L C C E L D E P L I I E Q G Q D E G G G Y L H C H V P D G L N E T E K  
UniRef90\_UPI0002490FAF A I N A T V N S G L V L T E R V L A K V I E P K L V L E S D D E E N G G G L L K V I S I P V D S D S Q K N  
UniRef90\_B9DU55 A I N T V N S V L E Q L A T D V I P Q S L I S D N E K V E N G G G Y M N T S I P H D S L L Q G N N  
UniRef90\_UPI0003714B6F A I N T V N S V L E Q R V A K V I P Q Q V I S D E K K A G G G F L K K V N V P N L D Q A T N  
UniRef90\_UPI000466F27F A I T T V N S G L I Q R V A K V I P I D V E N R R Q D A G G G F L E V H L V P P K L L E A T T  
UniRef90\_XOR585 S L G A V N A I H S I L L H V L E L H V D M K E D E G G G Y L F C S V I P P S G L L D S A L  
UniRef90\_UPI000369D309 T V G T V N A I V E K F T D I P F K A D V D E K R E G G G Y L K V L F P P S G L L D S A L  
UniRef90\_R5A9N6 C F N T V N A V I E K F T D I P F K A D V D E K R E G G G Y L K V L F P P S G L L D S A L  
UniRef90\_UPI00037FAD42 S F G S I N A V L E I R L C C E L D E P L I I E Q G Q D E G G G Y L H C H V P D G L N E T E K  
UniRef90\_Q8EPP7 S F G G V N A V I E K L C C E L D E P L I I E Q G Q D E G G G Y L H C H V P D G L N E T E K  
UniRef90\_V6J0S8 A F G S I N A V L E S L A N L R M D V V Q Q R D E G G G Y L E C C G L S D C P A D A N  
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UniRef90\_B8FUS2 S I S A V N G L E F Y L P C A P Q V E V E V D D P N Q G G F L S C A L P E N I S E E T  
UniRef90\_R9C848 S F G S I N A V I S L T G I T P I I K Q G G K D E G G G F I S C A L P E N I S E E T  
UniRef90\_I9L1I2 A I S T V N S I E Q V A H L Q Q A V Q S K E T N E G G L L I A D F T K L D L A N T  
UniRef90\_E7PVR9 A I N F V N S L E V L A D C C A L V D L N D V E G G G Y M V I T I P P H G Y M V I T I P P H  
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UniRef90\_F5SAK5 A V I G L T N A S E T L S G V Q L H D D V N E E E G G Y L E C R I S V R E A L M P E T  
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UniRef90\_L0KCT2 L Q T A V F G L E A Y L E L C P D V S T D D G W L N C R L Q Q S K L A C D D Q  
UniRef90\_UPI00037CBDE6 A I N F V N A L E A I C R A D S E L T V I D E K K G G F L K Y Q L P V D L N E D N  
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UniRef90\_W4ERN2 S V G T V N A L I A E I C R A D S E L T V I D E K K G G F L K Y Q L P V D L N E D N  
UniRef90\_UPI0004069B82 S F G A V N A L I A E I T G T P S M I T E Q G A D D G G G Y L R V V S F P E P E T N R  
UniRef90\_F9DV13 T L S T V N S L E S I T G K V V P Q V E S A A D D G G G Y L R V V S F P E P E T N R  
UniRef90\_UPI0003B368E5 T I L G T V N S L K D A L A G L E P V V E S D Q T N G G G Y L D V T L S H V D Q K  
UniRef90\_XOPRE1 I F G A Y N A I E A L L G Q V L L L E M A E Q G G G Y F Y V E P Y A D L A Q E K V  
UniRef90\_U6BEM2 S F G A V N A V M A L S D A D L E I E Q G G E G G G Y L W V A I P A G V T D D T K  
UniRef90\_UPI0002626C3A S I N T V N S L E A V L T D C A D V T M D E I D G G Y M K J A L P S D L T D L K  
UniRef90\_UPI00037CBDE6 S I N T V N S L E A V L T D C A D V T M D E I D G G Y M K J A L P S D L T D L K  
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UniRef90\_R2PR93 A I S C V N G I D A L A G V K P L I D A N E E E G G G Y L Y I E L P E D S T Q E Q  
UniRef90\_UPI000315588A A I G T V N A I Y A L L N I E P K L I E Q A N E E G G G Y L K V D L P T D I D S E V  
UniRef90\_R5QQN7 T T N T I N S I E T F T D D F S Y E E N E E T G Y M K L M L D E N A  
UniRef90\_UPI0003638DD9 S V G T V N A L E A L T G V V L D S K M D N G G F L S G R V I T S S V D S P Q S  
UniRef90\_UPI00037F935D A I N L V N A L E V L T D C Q A D I D M D D L D G G Y M N L D V I T S S D P Y Q S  
UniRef90\_UPI00024926B1 A I N T V N S L E Q L A S V T P Q V V S D D D N G G Y L K V S L E K D E A K K P  
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UniRef90\_A0A037YXT0 S L A I A N G I T E I V K A K A C I G T E D G F L S L S L E D E N V I E T  
UniRef90\_R9KPL5 V L N T I N S V E T L V S D S F D I E T D P E S G L I D F S L R E G Y  
UniRef90\_R9JC65 V I N A I N S M E K L A E D M I E T A E E A A G I T R C R I K R T L  
UniRef90\_A4XJS6 V L A N V N G C I E I L K A E H S L E Q K E G Y L E F E V L N N E E V  
UniRef90\_R6PQ49 S L N T V N A I E Q F T N V I P F Q A E A D E K K G G Y L K V V F P L E G M E  
UniRef90\_R5FTE7 V Q T A V L G L E M R V A G I N V E Y T V R Q E E G Y L K A V L P K N L S E R Q  
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UniRef90\_V2ZC70 A L N T L N S I E A L C G V E F N A I D N A A K G Y L K A E F K G K L  
UniRef90\_R2P1L6 A I S T V N S I E A L A G V I P N I E T N D D E K G G Y L H V N L D D S M T Q E Q  
UniRef90\_UPI00047ECA9A T I N T V N S L E K F T D D A F T C D A N A E E G H I L V T S E N G F  
UniRef90\_D5WUQ2 T L N L N S C Q S L L G V S L P A T A R N G F L D L D V P P D L P D E I  
UniRef90\_UPI00037C7F9D I L N F L N S L E N D L A D Y I P D Y A N Q E D G G H L E I D F S D F E R V S K  
UniRef90\_V2XVS7 V R L T E C A V N D V L G L E A S V K V R D K D A F L S L K L P N S L G Q T S  
UniRef90\_U2RKN0 G Q M T I N G L I E T L K L Q E K L E Y V E K D G L I T C D L K E S E L T D E E  
UniRef90\_UPI00046439D2 A I A V I N S L N K L Q K V E F K I V A D E D G H I E C I V D T S Y  
UniRef90\_R7CMH9 V I N T V N S L E T F T D D Q F E V Q E D D G Y I S F H F T A P V  
UniRef90\_J0N6L6 A Y L V A N G I D E V V I P K A D L S V S E G D M S L R I P E K A V F  
UniRef90\_V7I517 C M M I Y N G I T E I L K I P N R L D M R Q D G G Y F S M S I D K A S D A E K  
UniRef90\_R6NGN0 V I N T I N A L G M F T K E Q F K T N Q D E E T G L I S V S F E Q P A

|                        | 90  | 100 | 110 |
|------------------------|---|-----|-----|
| UniRef90_R7K882        | A H D A D V V L K T T L Y L G A S D L Y E G F S D Y I N L E V K N   |     |     |
| UniRef90_UPI00041F44A7 | D G V Q L L L R S M E F G L R Q Q I A E Q Y Y P E Y L V V I Q T     |     |     |
| UniRef90_UPI00037BFEDA | D E R S D A I L E T M V L G L R K E T A Q Q A Y S K K Y H R I K E   |     |     |
| UniRef90_UPI0003644C41 | Q V K S L L E T M V I G L K E T E K S Y S K Q Y L K I K E           |     |     |
| UniRef90_H5XZ75        | L E K A Q W I L L Q T M A L G L K E K I Q A A Y S G D Y I F I R I   |     |     |
| UniRef90_I0GTE8        | D D L T E A I L L Q T M L L G L M E I I Q K K L S P E A N V K R I L |     |     |
| UniRef90_B6G1G7        | I E K A Q L L L Q T H F Q L A I E Q E I I K R E Y P K A V K L       |     |     |
| UniRef90_G5JPW9        | E Q V W Q T L F A S V V I G L E N L A E N S S Q Y V A R P V I       |     |     |
| UniRef90_B2A6B4        | Q Q T Y E I L L E T V I I Q S E T A K N Y H E H M T I E             |     |     |
| UniRef90_J8QBE4        | L E K V Q L L L E T G M V A S L Y S T A Q E Y H E H M T I E         |     |     |
| UniRef90_U4QXV8        | R H D A N V I M A T T A E I G F K Q I E F A Y P D Y V K V L         |     |     |
| UniRef90_M1Z500        | R T K T E I V L K T L E V G L I K S I L E E G Y P E Y I T S L K     |     |     |
| UniRef90_R5KVG7        | G M E A E I L L K S L V L G L R D L E K E Y K D F I T S L Q E       |     |     |
| UniRef90_UPI0003B536EC | R G K I H L L L E A L A V S L R K N V A D E F P K Y V T I Q E       |     |     |
| UniRef90_F3B911        | G K E A A L L L K A M I L G L R R E M A E S Y P E E Y I T D L       |     |     |
| UniRef90_M3J573        | N G N V Q I L L L N G M V N Q L R S L A Y S Y P D H I K I N R       |     |     |
| UniRef90_K4LJY3        | K K T A G L I L Q T L E I G M H G I A G S Y S G K Y I E V R         |     |     |
| UniRef90_UPI00047DDA24 | R V K L D G I L E T M V L G L K D I A G Q Q Y S R Y V K I           |     |     |
| UniRef90_R5NS81        | S N E S K I L M K S L V R G V K D I Q K D N E K Y I K I             |     |     |
| UniRef90_F4BPD1        | S K I S Q I L L E S L L L S L T G I V E E Y P E Y V K L             |     |     |
| UniRef90_U2UTP6        | L E N A D V L V E S M Y S Y L K E V A K S Y S N F V K L K V I       |     |     |
| UniRef90_C5EUQ1        | S P E S Q L L M N S L V L G L R N I E K D Y G K Y I N V K E         |     |     |
| UniRef90_UPI0003B69AD0 | K R Q M Q L L A E G M I I S L R E T I A D Q Y G E F I S I K E E     |     |     |
| UniRef90_T0IX54        | D S L T G A I L E T M L L G L N E I A K L Y P K S V A I R I         |     |     |
| UniRef90_F5LNB4        | M A Q V Q L I I E S M I V M L H T I A S S Y S D Y I R I H T         |     |     |
| UniRef90_UPI00036EE70F | D E R T E A I L E T M L L G L T A I A E A Y S P R A V I R I         |     |     |
| UniRef90_F7V660        | G K D A D L L M Q S F L L G I Q E I E N N Y S R Y V D L I           |     |     |
| UniRef90_K1LSP1        | A H D S Q V L L K H L Y L A Y Q V L A D N Y P E Y I Q L N           |     |     |
| UniRef90_S0FFQ2        | R H D A E I I M A T A E I G F K Q I E L A Y P K H V K V L           |     |     |
| UniRef90_UPI000363A835 | K E K A S F L L E T G M V V S I K T I E L D Y G K Y I R L           |     |     |
| UniRef90_R5BDR1        | Q H D A E I L L N T M A A S L A S L A E T N G D Y I K L             |     |     |
| UniRef90_S2Y5D8        | S E R A A L L L D A M I L G L E N I A E N Y E Q Y I D I             |     |     |
| UniRef90_D9TP40        | S E R L C A I I D T M I L G L K D I A E K D Y P A Y V K V L         |     |     |
| UniRef90_R719N3        | M E Q A Q L L F G A L R I G F S A I A E Q Y P A Y F R L T I         |     |     |
| UniRef90_C0GEV0        | E A K V A L L A N S M L V G L E E I D R S Y P G F L K V S E         |     |     |
| UniRef90_I4DBC1        | L E Q A Q W I L E T L K L G I E E I E A V Y P A Y I L I             |     |     |
| UniRef90_UPI00037682B5 | D D L T D A I L Q T M I L G L K E I E N I N P K S I H I             |     |     |
| UniRef90_R6S4G8        | S K E A G L L L N T M I L G L K G M A E N Y E E Y I D L             |     |     |
| UniRef90_R9N9S0        | S Q S A G L L L K T M V L G L E S M A E N Y A E Y I D L             |     |     |
| UniRef90_R6WVW6        | S M E A S L L L K T M V L G L S E M A E D Y A Q Y I D L             |     |     |
| UniRef90_A1HNZ0        | D E R T D A I L E T M L L G I K E I A R L Y P R I V R I             |     |     |
| UniRef90_K9EYQ3        | N P D C Q L L L N H L L L G L Q Q T I E E N Y G E Y I K V N K N T   |     |     |
| UniRef90_M7P5L8        | D E S V Q L I L K S M I V S L Q T I E R D Y G E H I K V             |     |     |
| UniRef90_J4V244        | D E C T E A I L R T M Y M G L A E I E K I S P K G I K L H E I       |     |     |
| UniRef90_UPI00047B76A2 | S E N G E L L L K S F E L G I M G V Y K Q Y G N N I K F E E V       |     |     |
| UniRef90_R7R532        | S E H A K L L I D S M I L G L E I V S Q C G K Y I R L K             |     |     |
| UniRef90_BONAL5        | S K E A A L L L K T M I L G L R E M A E N Y A E Y I D L             |     |     |
| UniRef90_R5D041        | S A D A E L L L K S M V L G L T E M S E D Y A Q Y I D L             |     |     |
| UniRef90_D5HGB5        | D I K A Q T L M Q A L V I G I S G I E E S Y G D Y I                 |     |     |
| UniRef90_G8LYW9        | K E K V I S T I L E T V A V G F K Q L E L S Y G D Y V T V           |     |     |
| UniRef90_C0BW92        | S K E A E L L L K T M V Q G L T A M E E E D Y T R Y I D I           |     |     |
| UniRef90_U2EY62        | G E G A K L L F E S L Y L Q L S L L A Q D Y P K N I V I             |     |     |
| UniRef90_I9MAL7        | D R L T N A V L E T M L I G L T E I A K A N P Q S V R I S E         |     |     |
| UniRef90_UPI00046AE513 | D P K T Q L L L E T L A L G L S D I E E S Y P E Y I R L K I         |     |     |
| UniRef90_C4Z9Z7        | T G D V A L L M D S M I L G L K G I Q R D Y G E Y I                 |     |     |
| UniRef90_UPI0003F4AD44 | S D E A T L L M K S F E L G V T S V F K Q Y G E N I K F E E V       |     |     |
| UniRef90_R5UCH2        | S H D A K L L F K S M V L G L Q E I E E E Y P Y I D I               |     |     |
| UniRef90_UPI0003B6E813 | R H D V Q L L L K A F E I S I I D I N N K Y G K Y L T I             |     |     |
| UniRef90_W1U461        | D A R S Q L L I E T M L N G L R Q I Q A Q Y P E R L T I R E         |     |     |
| UniRef90_R5YMW7        | G S K S E L L I D S L A L G L R E I E N E N K E Y I T I             |     |     |
| UniRef90_D2RNX0        | D A K T D A V L K T M V C G L R H I Q K T Y S D Y L M I K E         |     |     |
| UniRef90_T0DCA2        | N E S V R L L I N S L F Y G V E Q V A E Q Y P E F V R I T T T N     |     |     |
| UniRef90_G5GF50        | S G K S L L L L D S C M L G I R S V A D E Y G K Y I K I             |     |     |
| UniRef90_K9ART0        | N K E A Q L L L Q A M L V S L Q T L E D E Y K A Y I K L N           |     |     |
| UniRef90_H1LTL2        | S E K S G L L L L D S C I L G L M D I G E E Y S D F I N I N         |     |     |
| UniRef90_UPI0003B75CB8 | V R D A S L F A D S L I L G L K G V I K E Y G K Y V I S L           |     |     |
| UniRef90_F2JQW4        | A P E A E L L L K S M I L G L E T V K E M Y G K Y I N I             |     |     |
| UniRef90_C4Z0A4        | S P E T S I L L K S Y E L G V S S V A E D N P K Y L S I S V         |     |     |
| UniRef90_W6RW96        | I E K C Q V L M E T M L V L G L K S L E V N Y K D Y V N V H I       |     |     |
| UniRef90_UPI00047D58BD | S K D T D L L K S Y E L G V N S I L F R E Y G K F L N I K I         |     |     |
| UniRef90_D0GKB5        | Y E R A D I L T Q S M F S Y L K E I A R Q Y G K Y V N L K I         |     |     |
| UniRef90_W7D562        | N A V V Q I L L E G M E H Q L T S L A Y S Y P D Y I T I N           |     |     |
| UniRef90_N2ABL3        | S H D A D L L I N T M I L G L E S L E E E Y P Y I D I               |     |     |
| UniRef90_A0A037YXT0    | I H K C Q I L M Q T M L L G L K S V E K S Y G E Y I K I K           |     |     |
| UniRef90_R9KPL5        | S K E S L L L T R S L V L G L Q G I Q E E N Y G E Y I R L           |     |     |
| UniRef90_R9JC65        | S E K G K L L M D S M I L G L L Q I E E Q Y G K Y L V V K           |     |     |
| UniRef90_A4XJS6        | T K G C S L L L Q T A Y L A L K E L E S Q Y P K Y V K V E V         |     |     |
| UniRef90_R6PQ49        | D E R V Q L L L Q T L W L G L S G I E T E Y N K Y L T L L K I       |     |     |
| UniRef90_R5FTE7        | T H D A D V I L S T L L L G V S D L Y E G F S D F I N L E V         |     |     |
| UniRef90_R9KK51        | N D K T K L L M D T M L L G L K D I E K N Y G K F I T I             |     |     |
| UniRef90_V2ZC70        | S E K A D L L M K S L M L G L D G I S H E Y G K F I T I             |     |     |
| UniRef90_R2P1L6        | M N I S Q I L L E S H L L L G L Q S I E T E Y L D F I E V Q T       |     |     |
| UniRef90_UPI00047ECA9A | S E D G E L L L K S F E L G I T G V F K Q Y G E F L D L K           |     |     |
| UniRef90_D5WUQ2        | S D Q V Q L L L E S C V F G L W Q T A V Q Y R H H V T               |     |     |
| UniRef90_UPI00037C7F9D | K E V V Q L L F D S F R L G M T L L G R D S A E Y V S T K V L       |     |     |
| UniRef90_V2XVS7        | E S T C Q T L L A A L M V H C V Q L A E E Y P E N I T V L E V       |     |     |
| UniRef90_U2RKN0        | L E K A D T L I E S M Y S Y L K A V A R S Y S E F V K L E E         |     |     |
| UniRef90_UPI00046439D2 | L E K S K L L I E H F Q L A V E E I K R E Y P K Y I K I             |     |     |
| UniRef90_R7CMH9        | T E R G T L L M D S L L L G L T E I E H S Y N N Y L T V K V         |     |     |
| UniRef90_J0N6L6        | L C R T L L Q G L R L H M G L Q E T Q Y P D N I R I N               |     |     |
| UniRef90_V7I517        | E K A Q V L L E T L R L G M K A I E T Q Y K D H I K I               |     |     |
| UniRef90_R6NGN0        | G H D A K L L L D T M V L G L Q G I Q N N Y G D Y I L L N           |     |     |

UniRef90\_E2ZC82 1 M I R I K M E K D R Q G R L C G F I V E G H A D Y A E E G S D I V V C A A A V S A L 40  
UniRef90\_R7FWW1 M I H V T T F Q N K Y K E C V G F Q T E E G H A D Y A D E P G G S Q D I V V C A A A V S A L  
UniRef90\_UPI00047A3CD6 M L K V V F E E R K C N G R Y L V S F D I A N E G H A D Y A G Y A E E G G Y D I V V C C C C A A V S A L  
UniRef90\_E3HAI3 M T E V V I I R S K E G R I L V F F S A N E G H A D Y A E H G G E D I V V C C C C A A V S A L  
UniRef90\_R5Y4L1 M I R I D F F C S D D K S L E G F E I S E G H S A G S A E A G G L D I V V C C C C A A V S A L  
UniRef90\_K1L197 M I R I Q Q G L S S D H N C Q V R F F E I L K G H A G E M A D E P G G L D I V V C C C C A A V S A L  
UniRef90\_R4K1T5 M I N I V F T K R K H N C F I S F N I N G H A G Y S E E E G G Y D I V V C C C C A A V S A L  
UniRef90\_UPI000289C02F M I N V V F T K R H N C F I S F N I N G H A G Y S E E E G G Y D I V V C C C C A A V S A L  
UniRef90\_F9MN97 M I C V I L G K N K A G Q F T S F S L Q G H A D Y A A E A G G Q D I V V C C C C A A V S M L  
UniRef90\_R6Y280 M V C V H F L T P K E G T V L G F S L E G H A G Y A E A G G Q D I V V C C C C A A V S S A  
UniRef90\_U2AKR6 M T K I L V R K T S T G G Y A G F T C I G H S G F A A A G R D I V V C C C C A A V S V L  
UniRef90\_R5IKU2 M T R V E F F D H E G R I T G F C C S G H S G Y A E A G G S D I V V C C C C A A V S T A  
UniRef90\_R6BZD4 M I T V T I H R S N D S Y A G F K V V I G H A G Y A E E E G G Y D I V V C C C C A A V S V L  
UniRef90\_D1AMC3 M I K I N I Y R K N G K I I R F V I V K G H A N Y G E Y G G E D I V V C C C C A A V S T S  
UniRef90\_G9YH34 M L H I D M K R D K H K H F C G F T V S G H A G Y N E A G R N D V V C C C C A A V S A L  
UniRef90\_R5LZG7 M T N I T F Y I K D S D K S I G F T K S K G H A G Y G I V A R G T D V V C C C C A A V S L L  
UniRef90\_R5K4L6 M I K V T I Y K K A N S D T M G F Y V S G H A G Y A D S G S D I V V C C C C A A V S A L  
UniRef90\_R9N555 M T T L T I K S K N G E Y K E V I L C K G H A G Y A D A G E N D I V V C C C C A A I S M L  
UniRef90\_V71142 M I K A H M T Y G T G N R I T M G F E L T G H A G Y G I E A G E D I V V C C C C A A V S V L  
UniRef90\_R6EHK8 M I N A T T Y V N S R H A Y M G F D L E G H A G Y S E A G T D I V V C C C C A A V S V L  
UniRef90\_L1N5V9 M I S V E I Y F T N E D G R I T G Y T V A G H S G T A K R E G D I V V C C C C A A G V S A L  
UniRef90\_F0Z1H8 M L K V T I Y K T D K H E Y V G F D A Q G H A G Y S A D R E G M D I V V C C C C A A A S A L  
UniRef90\_A5Z4H1 M T N I T F Y K T N N S F V G F R V L G H S G Y A E E E G S D I V V C C C C A A G I S V L  
UniRef90\_R5JWH1 M I Y I T I Y H S K T N R I C G F Q T S G H A D Y A E S G M D I V V C C C C A A V S A L  
UniRef90\_R6JMG0 M I S I D F F A V Q K G A L T G F S A H H A D T A P Y S G E D I V V C C C C A A V S S A  
UniRef90\_L7ENF4 M I D I I F M K K H N C L V S F N I K G H A G F A A E E G G Y D I V V C C C C A A V S A L  
UniRef90\_UPI00036FD617 M I K I K Y H Y T D E F R R K G F T I K G H A D Y A P I G G Q D I V V C C C C A A V S T S N  
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UniRef90\_R5EJS9 M T R C E F H T E G E R I T G F S V S G H S D Y A D E P G G K D I V V C C C C A A V S A V  
UniRef90\_R5HD83 M T T L T R K T K D S Y Q G F N C I G H A G Y A D A G S D I V V C C C C A A A V S V L  
UniRef90\_R5J5U9 M I Q T T V F K K S N D L Y C G I V I K G H A G Y A E E G E D I V V C C C C A A A V S A L  
UniRef90\_R6WUH2 M T K V R I Q K H N G S I V S V E C D G H T G Y G V E G E D I V V C C C C A A L S S I  
UniRef90\_UPI0001E2E78B M I N L N I V R D E S G N I V W G F L V E G H A E F A D E P G K D I V V C C C C A A V S A I  
UniRef90\_A0Q1T7 M I E A I F K K N E N I V S F K L E G H A G F D E Y N K D I V V C C C C A A V S A I  
UniRef90\_R6AN03 M T E I T V F L K G G K P I G F D A H G H T G Y A E C G E D L V V C C C C A A V S A I  
UniRef90\_U2EC67 M I I A K F K K D S K K I V S V N L K G H A D S A D E G Y D M V C C C C A A V S A I  
UniRef90\_R6R2P2 M T N I I F Y R K S G D I V G F Q S K G H A G H G M R E G T D V V C C C C A A V S A I  
UniRef90\_R5JXN1 M I N V S L F E D S N K N V V G F E V S G H A E Y A D P G M D I V V C C C C A A V S A L  
UniRef90\_R5C345 M I R V T V E K S N D T Y V S F R S K G H A G Y A S P A G E D I V V C C C C A A A V S A L  
UniRef90\_D9SS01 M V E V R F L R K N E R L V S Y S I D G H A E Y S E P A G S D I V V C C C C A A A V S A L  
UniRef90\_F4XAA8 M T T V T F H T A G E R I T G F T V Q G H S G F A E P E G G E D I V V C C C C A A A I T S A N  
UniRef90\_C9XNN8 M I K V R K Y Y Q N D D H L Q G F C L K G H A D Y A E I G G Y D I V V C C C C A A A V S N  
UniRef90\_W7YQX7 M I H V R I Q Q N Q H E D I V A F V M S G H A E A G P H G G D I V V C C C C A A A G A S A V  
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UniRef90\_UPI000463A428 M V S V T V F V D S E Q H Y T G I Q M L G H A G L K D E L G G Q E L V V C C C C A A A V S A L  
UniRef90\_R7N5P6 M T T V T I I Q S K D G E Y K G F V C A G H A G Y A N S G S D I V V C C C C A A A I S V L  
UniRef90\_D3LUL2 M I T I H V T A D V N G Q N Y A F S I A G H A E Y G D E A G G Q D I V V C C C C A A A V S A L  
UniRef90\_R5BNG3 M I K I H I R R N E A Q N I V A C S I N G H A G Y G E H G G D I V V C C C C A A A V S V L  
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UniRef90\_R5S7W8

|                        |   | 90                        | 100  | 110   |
|------------------------|---|---------------------------|------|-------|
| UniRef90_E2ZC82        |   | VPIVLETTVVVSGLNELIARQY    | PEYV |       |
| UniRef90_R7FWW1        | S | KDAQLLLENTVMILGLNEQMVDNYP | EYV  | DLL   |
| UniRef90_UPI00047A3CD6 | I | KKCAQVLLMELMLLGVKQKQIAEDN | YKSE | YVLL  |
| UniRef90_E3HAI3        | D | RELNQVLLMELMMLYLTVTQKQIAR | EYSE | FFKLL |
| UniRef90_R5Y4L1        |   | AQQQILEGLKHLKALAAADY      | P    | DNIIK |
| UniRef90_K1L197        | D | HDIQQLLCAQVITLALMTVTTQES  | Y    | PEYIK |
| UniRef90_R4K1T5        | E | KQIQILMKTMLSGMTQNMELINY   | S    | GDYIK |
| UniRef90_UPI000289C02F | I | KKCAQILMELMLSGIQQNMKLNYS  | ND   | YISV  |
| UniRef90_F9MN97        | S | EYTRQLITDQMYLGLQQLVLAQY   | N    | QSAV  |
| UniRef90_R6Y280        | P | RYCRDLDQGFKLHLLQSELVLEEQY | P    | NSAL  |
| UniRef90_U2AKR6        | N | KKTAALLMDSMMLLGLQSEVKEEQY | G    | KYIK  |
| UniRef90_R5IKU2        | E | EAQAVLQSGMMLTLLCAQLRQDDQY | P    | DDYI  |
| UniRef90_R6BZD4        | S | DKTTLLLDSSMMLGLRDIQTDQY   | G    | FFIR  |
| UniRef90_D1AMC3        | E | AELNILLLESMYKMLEEGISKEY   | S    | DDKIK |
| UniRef90_G9YH34        | N | EALRVLLEQTMVLLGLEEQIARQY  | P    | EYVVE |
| UniRef90_R5LZG7        | G | DGSQLLQSGMLKMLGLLEGIADQY  | P    | GNVV  |
| UniRef90_R5K4L6        | G | HDAALLMGVVFETGITTDIVSESY  | S    | DDFY  |
| UniRef90_R9N555        | N | EGSILLLDSSMMLGLQNVVSEY    | R    | KYIK  |
| UniRef90_V7142         | N | DEAQLLLDSSMLLGLADLJAQQY   | R    | KYIR  |
| UniRef90_R6EHK8        | S | HDAQLLVKTMILLGLAESMSDEY   | E    | PYID  |
| UniRef90_L1N5V9        | D | DDSTEALIKRTMYMGLAEETEKIS  | P    | KYIR  |
| UniRef90_F0Z1H8        | T | HDAQLLVKTMILLGLGEIEDEY    | E    | PYID  |
| UniRef90_A5Z4H1        | S | EQSQLLFKSLALLGLNDLYEENR   | D    | DFIS  |
| UniRef90_R5JWH1        | S | AADLLRSMVVGKGLKGLSEQQY    | P    | KYIK  |
| UniRef90_R6JMG0        |   | AQVLLRQGLKHLLSASLEEQY     | P    | QSIK  |
| UniRef90_L7ENF4        | I | EKCQVLLKTMMLYGLIQSNMKN    | Y    | NDYI  |
| UniRef90_UPI00036FD617 | N | EKTDDLLEHFEKLTMMKSIQKQY   | R    | KNKI  |
| UniRef90_R5X9T7        | N | DKTDDLLEHFEKLTMMKSIQKQY   | R    | KNKI  |
| UniRef90_R5EJS9        | D | TVQAVLAGMLVTLCSLRRDDY     | P    | DNIE  |
| UniRef90_R5HD83        | S | DRAKLLLDSTMILLGLTGTIEKQY  | G    | KYIR  |
| UniRef90_R5J5U9        | S | PESQLLMNSLVGLLQNTYGGK     | F    | YINIR |
| UniRef90_R6WUH2        | R | RDADMILNLTLYLGLIFDLHEGF   | S    | DFIE  |
| UniRef90_UPI0001E2E78B | K | EKVRIITLTVVGFKQQLQSY      | DD   | YISV  |
| UniRef90_A0Q1T7        | I | KSCQVLLLEHTEMLLGLRSM      | EQY  | RDYI  |
| UniRef90_R6AN03        | L | QAELLLGTMLLGLRSMVEQD      | Y    | SDYI  |
| UniRef90_U2EC67        | I | NKCAQLLEHTEMLLGLQGV       | VE   | YSGY  |
| UniRef90_R6R2P2        | S | NESELEFFKSLLELGLTEIARD    | Y    | GNVSI |
| UniRef90_R5JXN1        | S | DTALILRLFRCGMMGLEES       | Y    | GDYLI |
| UniRef90_R5C345        | S | AQRLMLDSSLVLLGLSQSQ       | QES  | YD    |
| UniRef90_D9SS01        | D | KARLLLETLLKLLGLEQMKSS     | Y    | EYIN  |
| UniRef90_F4XAA8        | E | STCAQLLLETALMLVHFVA       | L    | AEEY  |
| UniRef90_C9XNN8        | V | KDAQLLHFLQLAVKE           | L    | KREY  |
| UniRef90_W7YQX7        | F | EDVQLLQNGKLSLEEAM         | M    | ETYP  |
| UniRef90_R7BSJ1        | A | HDAADVLLRTAYLGA           | S    | DLYE  |
| UniRef90_T0CL13        | L | DDAQLLHFLQLALINE          | I    | KREY  |
| UniRef90_UPI000463A428 | S | SESQLLINSLVFGIQLDIE       | E    | EYGG  |
| UniRef90_R7N5P6        | D | E                         | R    | T     |
| UniRef90_D3LUL2        | T | E                         | K    | G     |
| UniRef90_R5BNG3        | T | E                         | K    | G     |
| UniRef90_H3NMV2        | M | H                         | D    | S     |
| UniRef90_H6LK27        | K | I                         | K    | T     |
| UniRef90_M1ZHR6        | E | G                         | K    | I     |
| UniRef90_A5I668        | H | K                         | C    | Q     |
| UniRef90_I5AQW1        | S | H                         | D    | A     |
| UniRef90_E3PRI9        | L | E                         | K    | V     |
| UniRef90_R6GBW1        | S | D                         | K    | A     |
| UniRef90_K8NE91        | D | E                         | Q    | A     |
| UniRef90_F9N3P8        | T | E                         | R    | G     |
| UniRef90_R5VK77        | S | F                         | P    | C     |
| UniRef90_U2TB43        | D | T                         | E    | T     |
| UniRef90_UPI00030B885F | S | E                         | A    | Q     |
| UniRef90_R6HWB8        | E | E                         | S    | V     |
| UniRef90_UPI0003A9FB5E | L | D                         | K    | I     |
| UniRef90_I4BW37        | D | D                         | R    | S     |
| UniRef90_UPI00047B39F7 | D | Q                         | L    | C     |
| UniRef90_R6NVE6        | S | H                         |      |       |
| UniRef90_UPI00047ACA5A | N | D                         | G    | V     |
| UniRef90_G7VA37        | C | E                         | K    | A     |
| UniRef90_R7K8E4        | R | H                         | D    | A     |
| UniRef90_E3GLP4        | K | I                         | Q    | A     |
| UniRef90_UPI0003F5284C | S | H                         | D    | S     |
| UniRef90_R6GDB1        | A | S                         | L    | C     |
| UniRef90_I0R7C1        | S | E                         | K    | S     |
| UniRef90_A6NRC3        | E | S                         | T    | C     |
| UniRef90_G5IGD6        | S | E                         | S    | E     |
| UniRef90_D4L7T5        | A | L                         | K    | A     |
| UniRef90_UPI0003B2E4E4 | S | N                         | D    | S     |
| UniRef90_B9YC15        |   | A                         | Q    | L     |
| UniRef90_E5V292        | E | K                         | E    | Q     |
| UniRef90_U5RW94        | I | L                         | K    | C     |
| UniRef90_HOURT6        | E | G                         | W    | R     |
| UniRef90_W6NL71        | E | K                         | C    | Q     |
| UniRef90_R5CEB2        | G | E                         | K    | A     |
| UniRef90_R6D5S4        | A | Q                         | K    | G     |
| UniRef90_U1R596        | L | N                         | I    | A     |
| UniRef90_R6C1U5        | Q | E                         | R    | S     |
| UniRef90_R6NM98        | N | E                         | A    | A     |
| UniRef90_R5N5C4        | N | D                         |      |       |
| UniRef90_Q1WT11        | N | E                         | S    | V     |
| UniRef90_R5YEB8        | G | H                         | D    | T     |
| UniRef90_R5TFU3        | G | T                         | D    | A     |
| UniRef90_R5S7W8        | E | S                         | T    | C     |





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UniRef90\_R5VR38 L Q L L L K S M M L V Q L Q T L A D E E F P D Y V R I N  
UniRef90\_UPI00047113BE S E K A K T L V D S F F V G I L M I A D E F P D Y V R I  
UniRef90\_R6TER5 E S T C Q T L M T G L M V Y F A Q L H D E Y P D N I E V  
UniRef90\_H8LG75 R E M T Q L F F E S F L G M A N L S E N Y S E F V Q T R V I T  
UniRef90\_S3L2P1 D E G L S A L L D F F L Q K G F D S L Q K E Y P A Y V S A E F V  
UniRef90\_D6GS75 S R V K A L L L D T F V L N L K D L E Q Y K D Y I K L  
UniRef90\_R6ITZ0 N D S A A A V L D G L K L H L T E S I S K Q Y P K K L K V I T  
UniRef90\_D1AXF2 L E K S Q S L I K S L A I M L E S I A K D Y P K N V Q F R T  
UniRef90\_F7PWZ2 D P Q V I Q L V L N T M V V Q L N T V W Q S F P E Y M D I S I V  
UniRef90\_R5XVQ9 A Q D I L C G L V L H L T E L Q K D Y P K N I K V I  
UniRef90\_R5W162 R H D A D I V L F N S T L L C G L Q D F Y T E Y S D Y I N L E V I  
UniRef90\_U7UD10 N E K V I Q L L F N S T L K L G L D L I R M Q F S E N L K I E I  
UniRef90\_R5RCT5 L N S L I L G L Q G M E D G Q Y T E F I D I  
UniRef90\_F9VJ94 I E K A Q I L L N T F K Y T L R E L V N E Y R N Y I K I E M  
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UniRef90\_R6V7A4 S E L L L K S L V L L G L N G I Q D E Y G K H I K L R I  
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UniRef90\_UPI000366FA6E D E Q G Q L L I R A L D M G L S N I E K E Y G K Y L Q V H  
UniRef90\_R5PIX7 S E A G K L L V D S F F I G I C L I A D E F P D Y I R I  
UniRef90\_R5C1Q0 S D K S K L L V D S L L L G L Q G L E E E Y S E Y I R V I  
UniRef90\_R7111 N E T A Q L I L K V M L I Q F Q T M T E T Y K K Y I Q Q M  
UniRef90\_UPI000316904C G D L L A G L K L H L L S L E E Q Y P E N I H V N  
UniRef90\_R6NCD3 E  
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UniRef90\_R6ZJ56 Q A A V Q L L L A S L R L G L D I A A S Y K K Y L Q V N  
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UniRef90\_R5Q5Z8 E S T C Q N L L T G L M V Y L T Q L H D E Y P E N I V E V  
UniRef90\_R6D0Q9 S E K L L E A F R D H M E Y I Q A K Y P G V K V E T  
UniRef90\_R5LIZ6 E D E V Q G L I Y S Y Y L Q L S E M L E D Y Y D Y L D V D C I  
UniRef90\_R5SQGH2 L A K F E L V I D G L Y L L A Q Q Y P E N V Q L  
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UniRef90\_E7MQ81 MI D I R Y T Q R H D N G G I L S F E E M T G G H A L Q A E S G G K D L V V C A G V S T A  
UniRef90\_UPI000287D4AB MI N I N F T K K S S E L V S F R V I N S G H A E Y A D S R Q G E D L V V V C A G V S T A  
UniRef90\_E7NRU8 MI S V L L E L G T R N E F F S V I T A S S G H A E T A P P R G G F D L V V V C A G V S T A  
UniRef90\_R9JS09 MI E V G V R K G G G I M I S S G H A G Y A P P A G Y D I V V V C A G V S T A  
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UniRef90\_UPI0003B4CDD8 MT N V E F H M E G G S R I V S V D V R G H S G Y A E K G G A D L I V V V C A N T V V V S L  
UniRef90\_C9LWD3 MT E I E I E R Q D G K I S G G R V K G H N G A E Y G G A D I V V V C A G V S S T  
UniRef90\_F9MW44 MI Q I D V Y D V E G I L T G F K A K G H A E Y N S K K G K D L V V V C A A V S S I L  
UniRef90\_A7HK69 MI K C K F F I E N G K F L S F E I S G H A E Y N S K K G K D L V V V C A A V S S T I L  
UniRef90\_D4LH17 ML T T K V R K N G S Y E E F I S K G H S G Y A E A G G Q D I V V V C A A V S S A L  
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UniRef90\_F5TEN2 MT D I Y I F K K D L Y Y G F E M D S G H A D F S K E E G G A A V S S S A  
UniRef90\_D1BA27 MT H V K F I L E D G S P V G Y V A E G H S G A G T R G N D V V V C A A V S S T L  
UniRef90\_R7G6D2 MI K V E V L R D K K L V V K T L V V K D H A G Y A P S G G Q D L V V V C A G A S S L  
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UniRef90\_D2Z3C7 MT K V V I S R R N G L I Y A L S V E G H S G Y A P S G G E D I V V V C A A V S T T L  
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UniRef90\_N2BFE1 MI K I T I Y R N A D K Q Y V R L H C I G H A G Y A P A R A G E D I V V V C A G V S S A L  
UniRef90\_R5KJ13 ML N V T I K Q G K I T A S E G H S G Y A P A R A G Y D I V V V C A A F S V L  
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UniRef90\_R7MRF6 MT I A E F L R S G K M W T G F R I K G H A G Y A E S G G H D I V V V C A S V S S A  
UniRef90\_D3R1F3 MI T V T F H L A E S Q L N G F S L V G H A G Y A K P G Q D I V V V C A A L T A L  
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UniRef90\_R7FW87 MT K V V F Y K S N G N Y I G F R E S S G H S G Y D E A G K D I V V V C A A V S A M  
UniRef90\_U2KL25 MT K V T V K Y K A N Q I E S I L E I K G H S G Y A E Y G Q D I V V V C A G A S S C  
UniRef90\_R7FLP5 MT K V T V K Y K A N Q I E S I L E I K G H S G Y A E Y G Q D I V V V C A G A S S C  
UniRef90\_A7B6M3 MI T C K F F K E N G F F E K F L I T G H S M Y A Q K G K D I V V V C A A V S S V  
UniRef90\_B7ICN3 MV T V K V V C A K D L T S S I E I E G H A G F D D S G K D L V V V C A G A S S I  
UniRef90\_D4JEM2 MI T A N F N Y K N N K V E S F E I S G H A F A G E P G G E D L V V V C A A V S S A V  
UniRef90\_D4W7Y1 MV N V E V K R Q S D F L Q E V L I H N H A E Y G E H G G Q D L V V V C A A V S S I  
UniRef90\_U5F8A0 MT T V R V W R I N G H V I R G L V S D H A E S V P A S G G Q D L V V V C A A V S S V L  
UniRef90\_C9M7F9 MV R V H V K R H Q G I Q E V E I S D H A G Y A D A S G G Q D L V V V C A A V S S I  
UniRef90\_R6UVM1 MI N I K I F K R N A N Y I G F E S F G H A E Y S D G D D I V V V C A A V S S T L  
UniRef90\_D7N6B9 MI N I N L L N K K D E L V G F E I E G H A N Y D E Y G K D L V V V C A S A V T T L  
UniRef90\_C2BDE7 MI C I T V Y K N R E Q D Y T A F R C M G H A G Y A V S G E D I V V V C A A V S V L  
UniRef90\_S0J680 ML N V S L L V D K E R K V G F E I R G H A D F A E H G G S D I V V V C A S A V S T L  
UniRef90\_C2CFP1 MV K I K I T Y H N N E Y K S I E L T G H A L A A G E Y G Q D L V V V C A A I S S G I  
UniRef90\_UPI00046FEE6A MI E Y K L I K K Q K G R L G L M V R G H A N F A L P G G K D I V V V C A S V S S A  
UniRef90\_H3K5J1 MT H A V I F K S G S H E I V G F Q T E G H A G Y A D A G S D I V V V C A A I S S V L  
UniRef90\_R7HD50 MI T A K F K K K N N Q I Y W Y Q V T G H A G F A N I G N D I V V V C A A V S S V L  
UniRef90\_A2RJH4 MV T V D I F R K D G K I V K V K S T G H A D H G S Y G N D V V V C A A I S S V Y  
UniRef90\_D6S8F0 MV K L T F F K R D G V Y Y G F R E T G H A E F A E D A G K D I V V V C A A V S S A M  
UniRef90\_R6TP78 MI K A S F K K D Y D G F Y A Y E V S G H A N Y A E A K G K D I V V V C A A V S S L  
UniRef90\_R3WV12 MI D V T L L I K K E K R L G F A I K G H A N F D Q H G Y D I V V V C A A V S I L  
UniRef90\_C7HU08 ML S Y F F Q K N A N N H I I T A E V S G H A L Y A P K G F D I V V V C A S V S T A  
UniRef90\_U6DZD5 MT K V V F K K E N G F W S R L E I N G H A N Y A N F G G Q D I V V V C A A I S S T A  
UniRef90\_R9JPZ1 MI K V N C V V S N G L I S K I S I K G H A D Y D T L G K D I V V V C A A V S S T L  
UniRef90\_R6TBC3 MI E V S V R M D R I S I T I T G H S G Y D E P G G R D V V V C A A V S T A L  
UniRef90\_R5ME76 MI K V N V K R K N N F I K E I L S G H A K Y D E Y G K D I V V V C A A V S T S  
UniRef90\_R9N6N9 MI V C K F K V L K G F Y E A F E I S G H A L Y A K K G K D I V V V C A A V S S V  
UniRef90\_R7MFW3 MI K I D V K R S R D H I A V S C V G H A N Y N T V G Q D I V V V C A A I S S T L  
UniRef90\_H9U9R1 MV K V S I S K H K D I Q N I D I K G H A F G D P G G Q D L V V V C A G I S T T  
UniRef90\_C3RHH0 MI K V R V T K E N D L V L G V K L L G H A M Y A N R G K D I V V V C S A A S S T  
UniRef90\_R9LY05 ML S V T V T K E K G E F R R L Y L L G H A G Y A D T D D V V V C A A V S S A L  
UniRef90\_R5M412 MT K I T F Y Q R V D G T F Q G F H S Q D H A G Y S A E G Q D I V V V C A A V S S A L  
UniRef90\_H1HRS3 MT E V H I L R D K S G R A V G I H S L G H A D Y D G D G T D I V V V C A A V S S A L  
UniRef90\_C8PMX1 MI Q V L L E L D E E E H L L S V E A S G H A N S G V K G H D I V V V C A A V T L  
UniRef90\_R6SJ01 MI K V E T K K E N G K Y V R I K I L G H A M Y D D Y G K D I V V V C S A A S S I  
UniRef90\_R9LZ14 MI D I K V E R R R K E F V I T I T S G H A N Y A E P K G K D I V V V C A S A V S S A L  
UniRef90\_H6N7T9 MI K I E F S K S S L L V S G H A N F A P K G K D I V V V C A A V S S A L  
UniRef90\_F5YJH2 MI H L G A V L D G T G L L R S C T V K G H A G A G P K G D D I V V V C A A V S V L  
UniRef90\_R6QN5 ML N A E F F S L P T G E L I G Y R I K G H S D M A E S G G Q D I V V V C A F V S S A  
UniRef90\_R6WAJ6 MT K V T F Y Q K N G V I G F D A W D H A G Y A N A S G E D I V V V C A A V S S A L  
UniRef90\_F8F073 MV A V D V V L D P A G L I K S C K V S G H A G A G P R N G D V V V C A A V S V L  
UniRef90\_R7M572 MI K V E V S K N M I S I K G H A N F G D Y S D I V V V C A S V S S T  
UniRef90\_C7RHJ4 MI N V D L L I K E G R T V G Y E I R G H A N F A E H G T D I V V V C A S A V T L  
UniRef90\_A8F8P8 MI K I V F Y T F K G G Y S G F K I N G H S N F D V K G K D I V V V C A A I S S A L  
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UniRef90\_E0E0X5 MI K V T F Y Y N D K F K I G F E L R G H A N Y G F G G D I V V V C A S A T T N  
UniRef90\_R7H173 ML H A C F Q E Q Q S L V G V S I C G H A A Y A D A G Q D I V V V C A G V S S A  
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UniRef90\_R7HIH3 MI K V K L T K N N N Y K R I T I T G H A N Y D D F G K D I V V V C A A V S S T  
UniRef90\_F5WT89 MI H V S V L I S K G F Y K K M T V T G H A G S G D H G F D L V V C A G V S S I  
UniRef90\_R6T3W7 ML C A D F F R N E H D R L V G F R I T G H A G Y A D Y G D D V V C A S V S S A  
UniRef90\_R7ESX8 MT K V V F Y R S C G A F Y G F E E Q G H T G Y G E A G D D V L C A A L S S A M  
UniRef90\_R6XD11 MT K A V F R K K E G L Y I N F E V N G H A S Y A D S G N D I V V V C A G I S T A  
UniRef90\_R6BIC5 MI K V R L T K K N N V I E S I H C N G H A N Y S R D G K D I V V V C A S F S T M  
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UniRef90\_E7MQ81 S D L L L L S A G I I Q L K T V E Q Q Q N Q S R F I K I K  
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UniRef90\_E7NRU8 L A R L Q F T A E F L A N G M K T L V K E Y P E Y F R V K  
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UniRef90\_C7LMZ5 N N N L Q L M L D M L K I Q I Q T L T Q Y P K F A R I K E V  
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UniRef90\_R9N6N9 S E R S K A L V N D S F F I G I C M I A D E F P D Y V R  
UniRef90\_R7MFW3 S E I T N K L L E N L V R T L K D I E S D Y K K N I T I K E  
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UniRef90\_UPI000371AB95 A L S S L N A I D E L Y P D C C E M S A S Q N K I L I R V I Q N  
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UniRef90\_R6GVN7 I Q T A L L I G L L T V V G T E V K Y D R V E G E D A R L S F S L P Q L D K D A  
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UniRef90\_R6ZEY0 V I T T I N A I I E F D P E S I Y Y E D L N N R I L I K K L K D  
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UniRef90\_R5YEY8 V I T T V N A I I S L N K D I T N Y D D T N G V K I K V L K E D  
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UniRef90\_F2JQV3 I G A A L G M L D W M I N E Q D K T K G L I D V T V S N S N Y G D R  
UniRef90\_A0A023CU89 A I S T I N G L E K L A H T D P K V D A N E E E G G Y L R V E L N S Q E L S  
UniRef90\_R7HFP7 I Y T T V N G L N L I N E K S I E F L D N D E Y M E L K V L S D D I T N S  
UniRef90\_D7RWI7 Y V T I T N E L S H Y I C D E I D T D K V T L M M I  
UniRef90\_UPI0002E9CAD3 T Q T L Y F T L I N K L G I S E S E I K D S Q G D G M L K I E I L N S N L F K  
UniRef90\_D2MP63 A F G T L N A L E T M K Q Q K L S V E E N E I D I E V L N P  
UniRef90\_R5FSB2 C F G L T A N I L T K L T K S C C I K I D D K N V Y I D I Q I T D V N V  
UniRef90\_R7C5P2 V G M L A N E I E N H E E M Y P G Q Q V E V K S G L A M I H T A Y R S  
UniRef90\_D8IEK5 S Q A M L N A L T E I V G S K S I K H K I N D G Y L S F E L I G F D K L S K E K  
UniRef90\_W8GFR6 I F G T V N S L D N L D H N N C Q I L I K D N L I E I N L K I T  
UniRef90\_V8AMD4 S I T T A N N L Y E M A K I K P I  
UniRef90\_Q65PU3 I T H T V N N C T K V T A T D K D G V L I A T F S D P K  
UniRef90\_Q0SR52 S Q S A I I G L D E V L K L N V N Y E M S D G Y L K L D L N G F T H E E  
UniRef90\_G7MA95 S Q S V I I G L D E V L K L N S T Y E M K D G Y L K L D L Q D F N R E E  
UniRef90\_UPI0003721BDE L T H T V N N C T N V A V N D K N G T L T A V F A N S E C I E N K  
UniRef90\_F2NRJ8 L G T S V E L L Q S T K G L V F N A D T S T R G F L E F R V E K S A V S A V  
UniRef90\_S6ETL4 S Q S A V I G M E E V L K L P V K Y E I N D G F L N V N I S N L N L E Q  
UniRef90\_R7P7T9 V I T S I N A C L E R I N K E S I K Y K E E K D K L T I D I S K  
UniRef90\_U2Q001 S Q S L I G L E S V L K I N S C S Y E I Y D G Y I S L D I S D I E K E E  
UniRef90\_R7IHJ4 V I T S I N L C L R F D K D S I K Y K K E T D K L T I E V L S S  
UniRef90\_D4LDC9 V Q L T T N T I T E I F R L P A K V E A L D N E  
UniRef90\_B0G3C5 T C S L I N S L R D L T G D R I Q A D T G S G M M V I E W E N L  
UniRef90\_R5HUT7 V I T S V N A I L R Y N N K A I K Y T N G D E L V I E I L K K

|                        | 90                              | 100                                 | 110 |
|------------------------|---------------------------------|-------------------------------------|-----|
| UniRef90_R5JDA1        | D H V T D V L L L N M I S L L   | K D L E K Q Y S K N I K V N E       |     |
| UniRef90_W7UHX1        | G D I S N R L L Y V L K Q H L   | E A I L E E F P N T I K I I T       |     |
| UniRef90_H2J538        | D E M I D K L A N Y L Y A L S   | Q I E E S Y P D N L K V I E V       |     |
| UniRef90_R5SU01        | M L L N N M I R S L S Q L       | E E K Y S K N I K I I               |     |
| UniRef90_UPI0004660C73 | N N D L Q L L M Q M L K V Q L   | E T I A Q Y P K N A K L K E V       |     |
| UniRef90_U2KM19        | S G N V Q R L F A G L E L Q L   | G E L S K V F P A N I Q V           |     |
| UniRef90_Q2NIJ8        | N T L F L L D N L E Y T I C     | N L V K Q Y P N H F K               |     |
| UniRef90_R6STY3        | D E L K R Y A V S G M F L G L   | E D M L E E Y Y D Y L D L A I       |     |
| UniRef90_M2P779        | Q L I L E T L V I S L K G L     | E D S Y G Q Y I K I N               |     |
| UniRef90_UPI000371AB95 | S P S I Q N V L N F L Y T Q L   | D M M R S Y P D H I K Q L           |     |
| UniRef90_R2QI13        | G T I E D T L V N T L L T G L   | R D I E S A H P E N I K V K V I     |     |
| UniRef90_B7C878        | C A E L Q L L L N T L L V Q F   | Q S I E E S Y P K N I Q V Q E V     |     |
| UniRef90_R7KBL1        | D K I V D T L I C N M I S L L   | K E L E E N Y K D N I E I K         |     |
| UniRef90_V5RJ29        | D K L L Q E F V D F L K I Q L   | E T I Q Q Y P K N L K L K E V       |     |
| UniRef90_S6G7W0        | D K Y L Q T M L N M L K I Q L   | H T I T T Q Y P K N T Q F K E V     |     |
| UniRef90_C6D4B6        | S K E A I L F K S L R L G M Y A | I Q S T Y G K F I T I E E V         |     |
| UniRef90_R6GVN7        | R H D A D V I L N T M L C G V   | S D L Y S E Y S D F F I S L E M K N |     |
| UniRef90_G4D4E1        | Y I K L Q D S F L F L I E G L   | S L L E K N Y S E H V M L K V D N   |     |
| UniRef90_F5Y7D8        | A A A G A F L C E G L L S V     | A E E Y P E F C Q V T I             |     |
| UniRef90_UPI00047D868B | N E T T E G L L K N L E Y T L   | N E L T T Q Y Q S H I K             |     |
| UniRef90_S5LT96        | N N L I Q E L L E F L M I Q L   | E T I S Q Y P K N F K I E           |     |
| UniRef90_U4KPB8        | D K I V E G L L K N L E Y T F   | E Q L K T D Y K K Y I K             |     |
| UniRef90_U2H560        | S A D N K V L C E T L L H G L   | Q D I S A Q Y P Q N L Q V I         |     |
| UniRef90_R7DLL2        | A V V L E T M M I Q L A T I     | E D S Y G K F I R I Q T             |     |
| UniRef90_R7CVC2        | T Q A L M K T Q H G L E I       | I Q L T M Y P D K L K L E I         |     |
| UniRef90_M2BHD2        | K P R L Q Y L L E F L T I G L   | M A I E A E Y P D C L D L Q I       |     |
| UniRef90_A6LLU5        | N E I S Q L F E V K E L L E T L | M D L S E D Q F P K F L K T E V N N |     |
| UniRef90_UPI00047D16DB | D P I M D K L V D N L K Y T L   | Y D L E Q Q Y P N Y I K             |     |
| UniRef90_B1C9T2        | R L K S D L T K S F M L S V K   | G I E E E N P E F I K L N I         |     |
| UniRef90_R7GJ89        | L K E I I N N L S D S L D M L   | A S A Y P K Y I K                   |     |
| UniRef90_E4L916        | T K E S E I I Q T M L E G L R   | E L S R Q Y P G R I K L             |     |
| UniRef90_R5ZKY1        | S D H D K V V L E V I V R E L   | K E L S K N Y P D Y V R L K E E T   |     |
| UniRef90_W0GKZ6        | H N L Q V I L N T L Y Y Q L     | L E T I Y Q Q Y Q N Y I S F K E V   |     |
| UniRef90_R6ZEY0        | D D I T N K L I N N M I E L L   | E E L E K S Y K D N I K I           |     |
| UniRef90_R6M6X8        | L I N V L I S N L Y E L E K A Y | P K N I Q I K E                     |     |
| UniRef90_R5D0L7        | L E L V R C G L A Q L A A Q Y   | P Q C V E V E                       |     |
| UniRef90_A0A037UNN8    | S A D L Q V V L Q T I Y Y Q F   | L T I Y Q Q Y Q K F I S V K E V     |     |
| UniRef90_V9H8N8        | I E K C Q V L L L T F E K S I   | E S L I Q S                         |     |
| UniRef90_R7GNF4        | R E D Y Q I I L E T L L K L L   | E T V E Y S Y E Q Y V K I N T       |     |
| UniRef90_R7PSZ8        | D S Y T E V I I Q T M L N G L   | T E V V Q K Q F P E R I V K I N T   |     |
| UniRef90_R6AKZ4        | D K L V Y R L F D N L K E L L   | T D L S K D Y P K N I R I E E       |     |
| UniRef90_R5TQN1        | N E I V D N L L N M L N M I K   | E L A N D Y P K N I K I E E         |     |
| UniRef90_F0GUA3        | S L E I D T V F T Y F E T G I   | Q T L L G N Y S D Y V K L R         |     |
| UniRef90_R5Y EY8       | E V T N K L L D N M I N L L     | Y E L Q K D Y E K T I K             |     |
| UniRef90_H9UK95        | Q A A G R V L L N G L E S I     | Q A D Q P D H A V I E I V N         |     |
| UniRef90_F0KCM0        | L E R A Q V L M K T T L L G F   | E N L A E S Y D E Y I K V S V       |     |
| UniRef90_R7JW27        | A L L V K S L L L G L E S I     | R R D Y G Q Y L E I                 |     |
| UniRef90_R5GFJ3        | E L G T A I D V F R T G M E M   | L E S Q Y P D N I R V E V           |     |
| UniRef90_W6AFY6        | N K Q V Q D I L E F V K I Q L   | E T I A Q Y P K N F R I E E V       |     |
| UniRef90_D1Y1T5        | A E G T R V L S E T I A R A L   | Y E T A Q S Y G S Y V K             |     |
| UniRef90_R7FD37        | A A R L F A G L E L Q L G E     | L E K A F P A C H L E               |     |
| UniRef90_K9AMH1        | D V K V K T L L D A M E V Q I   | V M L L Q E M K K H V Q L E I       |     |
| UniRef90_H7EH62        | K I E A E S R L D F I R S G V   | S S V S D E Y P G Y V L R E N T     |     |
| UniRef90_R5Z745        | Q E G F G T I M A F I T G C     | E E I A T A Y P D Y V S V           |     |
| UniRef90_D2IZT7        | I K D S Q Y I V T I L Y E N L   | C E I A K E Y P N H I E I           |     |
| UniRef90_S5LZB3        | E F M I I Q L E T L E V I Q Y   | P K N F K I E                       |     |
| UniRef90_F0YWR3        | S E T G M A M V D S F F T G I   | V M M A E E Y P E Y V R L           |     |
| UniRef90_U4KT21        | S E V V E Q V L L N L V E T L   | L E L E Q Q Y P K Y I K             |     |
| UniRef90_UPI0002F758CB | D E I V N N L L T N L E Y S L   | K D L N K T Y S K Y L Q E K I I     |     |
| UniRef90_R6NLL1        | S H E T E L L N S L L G L Q G   | I E E E Y M E Y I D V               |     |
| UniRef90_R8VTB1        | S G A T D V L F Y A A V I G L   | A Q L Q N T Y P N Y I Q M R T       |     |
| UniRef90_R5MRB7        | S D I V D T L I N N M I D L T   | E L S K Q Y E N N I K I             |     |
| UniRef90_R6QDC0        | K A Q L L L D S L I F G L K     | S I E S Y K K E I V V               |     |
| UniRef90_R5J9J4        | N K V V D G L I N N M I N L     | L T E L K N D Y K D N I D I R       |     |
| UniRef90_V5UQW6        | Q A F V L A L K D T L C L I     | S G S Y P K N L S V S V             |     |
| UniRef90_UPI00047AE4FA | N D E L Q T M L K M L Q I Q L   | D T I A V Q Y P K N V E L K E V     |     |
| UniRef90_R5V4L0        | I E E V E A T L E T I R A G Y S | M L E N E Y P D Y I K L G V L       |     |
| UniRef90_N9Z3U2        | I E R G Q V L L L T F E K S L   | E S L E A S F G K Y I K I K         |     |
| UniRef90_L1Q2X7        | L D A V I L M L Y Y G L N I     | N Q Q Q Y S N Y L S V V I D T       |     |
| UniRef90_F2JQV3        | N S D A Q L L L A N L E L G L   | Q D I E K N Y A N Y I R I T E       |     |
| UniRef90_A0A023CU89    | L L L N M M T M L K E I E K     | C Y P K N I K V N E                 |     |
| UniRef90_R7HFP7        | D D K T D A L T Q A L H N G C   | A I Q E N Y P D H V D V             |     |
| UniRef90_UPI0002E9CAD3 | R R D V I Q T C F E F M I M G I | E L I E E A Y P E Y L T L K         |     |
| UniRef90_D2MP63        | D Q V T D T I L R T A Y I Q C   | E T V R D Q N Q E F I Q I K         |     |
| UniRef90_R5FSB2        | S K E V K I V M E T L Q E T L   | E D I S S Q Y P K F L T I           |     |
| UniRef90_R7C5P2        | K L R A N I V F G M V V D A L   | L A L E E Q Y P E Y I K I           |     |
| UniRef90_D8IEK5        | A Y E Y I T V S R G Y L L G I   | K S L I K E Y P D Y V K Y K E       |     |
| UniRef90_W8GFR6        | I Q N Q I L L K G L Y Y S L     | S T L Q E D N Y D N I K I K I       |     |
| UniRef90_V8AMD4        | S I E N K T L L N A F E N T V   | N Q L I D Q Y G Q Y I               |     |
| UniRef90_Q65PU3        | I V E A Q V L L K T F E M S L   | A S L E A S F G K Y I K I K         |     |
| UniRef90_Q0SR52        | L N Q A Q V L L K T F E K S V   | E S V                               |     |
| UniRef90_G7MA95        | T L L N A F E S T V N Q L       | V E Q Y G Q Y I T V                 |     |
| UniRef90_UPI0003721BDE | E R L K C I G D F I R F A F I   | K L S A E Y P D N V R F Q E I       |     |
| UniRef90_F2NRJ8        | I K S A Q V I L L T F E K S L   | E S L E A S F G K N                 |     |
| UniRef90_S6ETL4        | D K D V L L I I E N M M S M L   | E E L A K T Y G K N K I             |     |
| UniRef90_R7P7T9        | L L K A Q V L L K T F E L S L   | E S I E A Q S F G K N K R D K Y I   |     |
| UniRef90_U2Q001        | D E K V I T L T I E N M L M M   | L E E L A S T Y K K N I K I         |     |
| UniRef90_R7IHJ4        |                                 |                                     |     |
| UniRef90_D4LDC9        |                                 |                                     |     |
| UniRef90_B0G3C5        | S D G G K L L I D S W F L G L   | T D I N R E Y                       |     |
| UniRef90_R5HUT7        | D E I V N L L I T N M L E L L E | E L E K Q Y P E N I R               |     |







