

| QUERY <br> UniRef90 UPI00036CCA8A | SSAEEGKNLAPNQQVLILSDK |
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|  |  |
| UniRef90-UPIo003F64519 ASVEKGTAVSANQQVLLLTNK |  |
| UniRef90-UP10003758406 | LKAN |
| UniRef90-B4U4K2 VSKKAGTNLAAN |  |
| UniRei90 ${ }^{\circ} \mathrm{ETPWF}{ }^{\text {a }}$ |  |
|  |  |  |
| UniRef90-UP100037F73CA | TSVAKGKNLKENQQILLL |
| UniRet90 | VSVDVGTNLSSNQQ |
| UniRef90-E4L557 M |  |
| UniRef90--12J563 | A SVAEGKNIEPNEQ |
| UniRet90_UP10004775D85 V SVEEKGSNI EANQQ |  |
| UniRef90-A0A024DCB | NLEANQQILILSDK |
| MSVTKGTKLKANQQILVQAGK |  |
| UniRef90-UP1000366D89 | TSVKIGTNLHANQQLLLWTG |
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|  | VSAQEGTDLAPGHQLLLLTNK |
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| UniRef90-G5JRQ9UniRef90 H6PB20 |  |
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|  | Q |
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| ef90_B9D |  |
| LSVEAGKNVASNQQVLLLTDE |  |
|  |  |  |
| VSVKEGKNLKANQQVLILSS |  |
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| UniRef90-- ${ }^{\text {U }}$ |  |
| UniRef90 NoCD96 |  |
| ef90_G5 |  |
| iRef90-U5P6 |  |
| UniRef90 $17 \mathrm{KGI6}$ |  |
| UniRef90-G5K4D2 |  |
| UniRef90 UPIO003788686 S S V K G K ELK ENQQ1 L L L T N |  |
|  |  |  |
|  |  |
|  | QSVAKGQEVGANTPVMLLTD |
| UniRef90-UP1000225BEF2 V V V E E G T K V LP P ERVIVI T D |  |
| 2RL |  |
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| UniRef90-1FIU4 |  |
| UniRef90-52GU1 | KSKGTKLT |
| SiRef90-Q8CXI7 S |  |
| UniRet90-N4WGE5 |  |
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| UniRef90 Q4LL5N |  |
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| UniRef90-S4D9U0 QSTENGDELITGERL |  |
| UniRef90-B9CTH5 |  |
| UniRet90-R2PTB9 |  |
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| UniRef90-Y5PJD7 |  |
| UniRef90-D3QDL0UniRef90-R7KD5 |  |
|  |  |  |
| UniRef90-W6TC82 |  |
| UniRef90-S0s3R0 |  |
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| UniRef90 W4VG00 |  |
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| UniRef90-W4VG00 |  |
| UniRef90-SOPEB8 |  |
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| UniRef90-F2MMF2 |  |
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| UniRef90-Q1WT97 QSVEGDQTVIS GEK |  |
| UniRef90 <br> UniRef90 |  |
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| UniRef90-UPIO00382E23B QSQKPGAKVIKGERVILVTDKUniRef90 AOAO24PH89OLP |  |
|  |  |  |
| UniRet90 A0A033V8H2 Q1 P L K GKNV QDKERILLLVTD |  |
| Uniefo R3WND2 ${ }^{\text {a }}$ ST P GEELMASEKL |  |
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| UniRef90 |  |
| UniRet90-W7D7V1 QL |  |
| UniRef9O UPIO00361C6B5 |  |
| UniRef90 UPI0002492B76 |  |
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| UniRef90 UPI00036A5 |  |
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UniRef90_SOKAZ8
UniRef90_R0EQC3 UniRef90_R0EQC3
UniRef90_UPI00040217B1 UniRef90_H4GL78 UniRef90_B9DPR1 UniRef90_W7D9V6
UniRef90_N1ZKY4 UniRef90-UPI000472D2BF UniRef90 UPI00040BB5BB UniRef90_S1NDM7 UniRef90_E6TTT6 UniRef90_S1QZV5
UniRef90_R9WKG1 UniRef90-TOVI90
UniRef90_R7F1R5
UniRef90 V5XNE3 UniRef90_UPI00037BDE6B UniRef90_M5P4P5
UniRef90_A4IM02 UniRef90_D7UXP6 UniRef90_UPI000299E3DB UniRef90_M5AF52
UniRef90_Q65JY6
UniRef90_B7GGI8
UniRef90_UPI000262683C
UniRef90_R2SFT2
UniRef90-G9ZKZ7
UniRef90-I0JM48
UniRef90-UPI00040ACD50
UniRef90_U5L8Q0 UniRef90_UPI000468085D UniRef90-W1SLI1 UniRef90_Q03EX9 UniRef90_G6CFR0 UniRef90-W7CGQ6 UniRef90_UPI00047E0DF4 UniRef90_K6DDD0 UniRef90_Q38XN1
UniRef90_D6XTM2 UniRef90_UPI000315C7FC UniRef90- G2SPV0 UniRef90_UPI0003690379 UniRef90_C2ERV1 UniRef90 UPI000468DCE9 UniRef90_UPI00040F2043 UniRef90_E6LCJ7
UniRef90_M2NDC0
UniRef90_G9QMH2
UniRef90_UPI00047B21B3
UniRef90_E3DZ48
UniRef90 UPI00037834FD UniRef90_A0A015L2M1 UniRef90_UPI00047CD990 UniRef90_W7C8X9 UniRef90_UPI0002490D32 UniRef90_A0A023CRA5 UniRef90_R5TUK4 UniRef90 UPI00046899C5 UniRef90-W7CYB0 UniRef90-J8Q4T1
UniRef90 S9T007 UniRef90 X0PH80 UniRef90_R5XII6 UniRef90_D4W6Q7
UniRef90 UPI00047C5066
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UniRef90_R5R8S5
UniRef90-M1L3B3
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UniRef90_R7AY00
UniRef90_R6C2P2
UniRef90_UPI0002E57514
UniRef90_R7G5W9
UniRef90-UPI0002E4B515
UniRef90_G2TJX7
UniRef90_UPI000348BE22
UniRef90 Q8RT75
UniRef90 V71046
UniRef90_C2D1W8
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UniRef90-UPI0002F6B23D
UniRef90_Q9K9S2
UniRef90_K0IYV8
UniRef90_UPI00021970AF
UniRef90_U5SBB1
UniRef90_UPI00035FE968

Q S I K A G $\square \mathrm{K} \mid \mathrm{V}$ L|PNEK|I I LIKT

 APSTTEKLLPHSKVLLKTD LP QP GERILE GQRVILMT QS QTA GTSMLTTGERVILLVTN
 Q GT P H G T K V L A G E K QYP T A GQE $L$ L S GEKVLLL T Q S A V P D E Q V L T D Q H V I L D

 $Q Y P K A G E A V L P N E R V E L K T D$ QLPS G GERVLPGERVVLKTD QLPK P GT TLLK G QRVV MLT QSIA A GNTLLS GEREI L L T Q S V A A G T T L YY DERVVETT T QYPKAGEAVLPNQRVFLKTD

 QSTAHGTQLLPSEKLLLKTD QSVAA GQKVAEHSRVFI LT LLPEPGAEVLKNQRIMVITD Q QEPAKGTKVLKGERVILRTD QLP EPGASILEGERVVI KT D QL P A S GEKV MP GQR IV L LT N QLP E A GT A I L E G E K V I I Q T | $Q$ | $P$ | $K$ | $A$ | $N$ | $S$ | $V$ | $L$ | $P$ | $K$ | $Q$ | $R$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $V$ | $L$ | $L$ | $D$ | $T$ | $G$ |  |  |  |  |  |  |
| $Q$ | $P$ | $Q$ | $E$ | $G$ | $E$ |  |  |  |  |  |  |
| $L$ | $M$ | $M$ | $E$ | $G$ | $Q$ | $K$ | $V$ | $L$ | $L$ | $T$ | $D$ |

$\mathrm{H}^{\mathrm{L}}$ QLPKA GTTVLEGEKVI I QTD
 QQPAPGSRII YGNKVELQTD

 | Q S | S A G T T | $L$ | $Y$ | $K$ | $N$ | $Q$ | $R$ | $V$ | $F$ | $N$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | HSPNDDMAVLPYERVEI KT D Q S IDDVGKTVLP GEK L LL L T N

 Q P F E N R H L L FA G E R V I L R T D QYPKA GEEVLTNQKVFLKTD QVPAAGEKMLQGEKAVLLT Q $I P K A G T N D A P S Q R I Y L V T E Q$ QYP K A G E E I LP P E R V F L K T D

HVVPRA G D R I I A G E R V Q Y P K A GATASE DD KV F L VT N QSEKAGSVMVS GSKVLLLSN

 QS P A A GNTVVPSGGQVVLVT. QS P S A GNDVVVSGSKVVFLQTGK QYPAAGEPLI DGEKVEL RT
 Q S P $\square G G Q K S L V G Q R V F L N T G$ Q Y P E T G S TVLDG GRVIL QYPEAGSKVAKNDRVFIKT
 Q YPSSTTEVTMGSKVLLLTD
 QYPAKDSTMINSNDRVFIILTD
 QYPQENQTIVSNQNI FLLSD TWP T S GSQVETNQRVLLKT D


Q S VA A ETK LVK N GRVILVTN QSPAANTTLAERKRVEILTN Q Y P A A Y E QVVP GK QI IL V S D R QYPSEGTKLETEEAVYLVTDK QQPY S GHKLLEGERVILRT A N $\square E P G K Q \amalg L S T H K L I L M T D Q$ QSPAP $\square$ GAGAGNNHII LLT $Q \square P L P N E T T \| E N Q R I V L M T N$


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| :---: | :---: |
| UniRef90_K8ND14 UniRef90-A0A024Q0Z0 | SVKQGDKVLVNDHIILVTDK |
| UniRef90-NOAPO7 | QLPAQNEEILEGEK |
| UniRef90' ${ }^{\text {d5 }}$ | QSPTSDTVVTGQRV |
| iRef90-R6XWL7 | QYP保GTV NGRVF |
| UniRef90-UPI00047DA1F9 | QLPKAGS |
| UniRef90-UPI0004746964 | QFPASGTE |
| UniRef90-b9EB49 | QLPAKGTKLLADDKV |
| UniRef90-UPI000288E31E | QYPAAGLDVSTSQQVY |
| UniRef90-G8F | QSTNPGTKVLVGQRV |
|  | QlkKGKKESGR |
| UniRef9-UP1000472DC77 | QSPAVNTKV |
| UniRef90-C5RAG9 |  |
| UniRef90-G8NOB7 | QLPQGGDHVLLGERV |
| UniRef90-UPIO004737F94 | QFPKAAHTVI SGEKV |
| UniRef90-A6CN53 | QSASPGDVMLQGERV |
| UniRef90-X0P | QLP LiaENVLAG |
| UniRef90-UP1000400ABCB | MLPMPNQSLLEGERV |
| UniRef90-R5ABX8 | QVPKAGAKVEAGSEV |
| UniRef90-R7H | QYPLK GIJSVVKGDKV |
| UniRef90-A0AO24QD75 | SNVTEGDSVLPNDHI |
| UniRef90-R6H5K9 | QYPEAGVKTSQSSKV |
| UniRef90-R5JCA3 | QSPEAGVKLEEGSTV |
| UniRe990-R5N | QYPNKNNTVMVNSKV |
| UniRef90-UPIOO | QSPNSGTTLYDNQRI |
| UniRet90-M1ZH60 | QYPQGNEEVMAGQT |
| UniRet90-U5F5U0 | QFPKAGDAI MSNQRMF |
| UniRet90_G1VUF5 | QYPEVGETIISNQNVFILTD |
| UniRet90_M7PAT7 |  |
| UniRef90_UPIO004057 | SNVREGEKVLPNDHVLLITEK |
| C6 | ISSGTVVSSGQR |
|  | QYPEAGTKLATGQRI |
| UniRef90-UPIO003B7151B | QYPAGGQSTLAGQRA |
|  | QYPKKGTVVNSNKV |
| UniRef90 UPIO00475B90A | QSPAADTLLI QGEKIV |
| UniRef90'H3NDW4 | QSPLANATTYDGERV |
|  | PNKGET |
| UniRef90-F9DPK3 |  |
| UniRef90-C6D561 | QVPASGASVHPAQKVYLTTEQ |
| UniRet90-U4TXD3 | QLPAANSHVLAGQRAV |
| UniRet90 R5TJN9 | QYPSQDNUIYKGDRVFLLT |
| UniRet90_R5KRR0 |  |
| UniRet90_EORGN4 | QYPEAGVKMKPGQR |
| UniRef90 UPIO002892B7E | ASGEKLMQGN |
| UniRef90-R5A582 | QYPTEGTTLNDGNKI |
| UniRef90-V6M389 |  |
| UniRet90 M8D811 |  |
| UniRet90_R6SLY |  |
| UniRet90_-4FSW6 | QSPSAGTTQAEQKRV |
| UniRef90 W9 | QSPAAAAPKDLIASR |
|  | QGIKKGERLESGDK |
| UniRef90 KODED6 | QSLRPDQKSLTNQL |
| UniRet90 UPIO0047522ED | QFPAAGTELPGS |
| UniRet90_R9LNW4 | KEGQ |
| UniRet90 B2GB75 |  |
|  |  |
| UniRef90_C2TY51 | QS GEVM |
| UniRef90-UPIO00363C810 | EPGSVLPTSERVYLFTEK |
| UniR | QYPTEKSEVLSGGL |
| UniRef90_B1- | QYPKDTKQLVKGSYV |
| UniRef90-UP100047CECBA | QLPKAGTTILEGEKV |
| UniRef90_H2BY73 | QSVPPGEKIRNNQKVAL |
| UniRet90_-8 8 HZQ1 | Q |
| UniRef90-F2F7 |  |
| UniRef90-B7C7L7 | QYPDANDT NSNDR |
| UniRef90-D5H2N6 6 | QGVK SGEKLESGSK |
| UniRef90-S6BRN7 | QL |
| UniRet90 Q04ES7 | Q S S A |
| UniRef90 - R6P8M1 |  |
| UniRef90 ${ }^{\text {K } 41 J 09 ~}$ | QSTKKGTKISNN |
| UniRet90-UPIO0036408F7 | AGSSL |
| UniRef90-D3F | HSPEGGNALLEGEKV |
| UniRet90_Q5W | QQPAPGTKVLPGDRIVL |
| UniReef90-A3X173 | QSLKAGQKLSKNQKI |
| UniRet90-B1MXV7 | QSLLPQQK SLT NQL |
| UniRef90-Q042P6 | QSVSAGVKQGTDDK1 F |
| UniRef90-C7XTC9 | QSLSPGTRVVINNR |
| UniRef90-UPIO0047C32A0 | QV |
|  | QIPSPGTVISLSQRVYLITEK |
| UniRef90-UPIIO002195A0E | QSIKGGQSAVKGQLVL |
| UniRef90-R5ITU7 | QLPAPGSQVPGNSQ1 |
| UniRef90-D5DJT9 UniRef90 W4BEA2 | QSPAAGTKVKEGETVRUYMGK |
| UniRef90- 66 D 1 H 1 | Q DPASGALVHPGQKVYLITEQ |
|  | GQRVYLLTDE |
|  | DAPKDLSRRV |
| UniRet90-R6CU75 | QYPNKNSK |
| UniRet90_E4Q4V1 | QVPKAGFMLKEGSTIILFT |
| UniRef90 W2ULU UniRef90_Q26BBO |  |


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| UniRef90-G4HE78 | K |
| UniRef90-UP10003025696 | ETVPDVAGAPTDELVSSLNEQGFKPFVVGDGNQI VA |
| UniRef90_W7Z211 | GIEMPDLVGEHPTNLAGL NEEQVVVIGDGRTI EK |
| UniRef90-A4CPL4 | ThPDLRGMSGMDADS LENDGVQVEVRGNGKVKR |
| UniRef90-R5M315 | KLDNYVNKKTEDAKTTLDAKQ! KYıVIGNGTK\IK |
| UniRef90-W8QVN | TMPSFLDLLEKGAETEAKNKKLSPVVIGDGLSSIKR |
| UniRef90-R5 | S IV VLESYLNTDVLSTEEKLKALGLNPVVIGDGKYVVN |
| UniRef90-UP100047 | LIKVPNFVGLSKKELQEQLVNLKLD |
| UniRet90-D6S4 | EVPNVVGKSVSNAKNI EKVALSVEVLGSSDVVTQ |
| UniRef90-V9G3J6 | THRAPDMTGEQVSEVKAKLLEEGVTFELLGSGNTVKQ |
| UniRet90-K9AJM2 |  |
| UniRef90-A3DE32 | VVEVPDVTNKT IDEATKALNAAGLNTKVVGNGNAV K |
| UniRef90-B1YIU1 |  |
| UniRef90-R9LH60 | S |
| UniRef90-R5Q833 | YTLDSYTNQSVNYVKSKLESKSLSVQII GNGSSVIE |
| UniRef90 K8EQ30 | VVMPRVMGSLKEEARQKLEENKLNVTII GNGDT:VQ |
| UniRef90-E7RHK1 | VPVEEYTGKTVTQATEALQELGIIEVEVI GNTEEII S |
| UniRef90 R7P8J4 | KLNNYVSREVEKSVIDDLEQNKLKVIVVİGNGKYVV1 |
| UniRef90-K9EYZO | EVPNLIEKDKEEALDLVEEADLEYSLVGQGDKIVQ |
| UniRef90-17LE42 |  |
|  | KMPSLANHSMNYADEQLAGKKVNVIKI GNGNNVID |
| UniRef90_UPI0002E6 | AVPKLTEMSANAAVTRAKQAGFQSELI GSGTKVVQ |
| UniRef90- UPI000476 | MPDVKGMSGMDAISILLENMGLEVEVKGNG KVKK |
| UniRef90-F215T5 | AVPNVVNSSTQSGQQTMQGNGVNVEVIGDGDKVIE |
| P45 | QFETKDYAKTTIAKVKDDLNGKEIELVLLGDGDKI EA |
| UniRef90-R7M UniRef90_L1N | KIVVKDYANKVTTNVVRELNNKG1/ KVIT |
| UniRefor | K |
| UniRef90-K4ZHY | VGNYVLKPVKESAEAIKDKRLQPVILGKGTKVLE |
| UniR | VSMPKLVGMSTTAAKLIRAEQDNITVNIMGTGTKIVN |
| UniRef90-UPIO002488 | KMPDLTGQSLDDAKSAMNKLGVSAEPIGQGPKVIA |
| UniRef90_R7FG33 | TVPYLQSADITSAESTLAQLGLTYEVVGDGTTVAS |
| UniRef90 UPIOOO35CEC56 | TVMPDLRGYPAMDAVSTLENLGLKVKLVGDGKVVQ |
| UniRei90-UP10003B41122 | GTLPNLVGQDLKTAEKTLKDLGI QMKAIGG GSTVTA |
| UniR |  |
| 5NU70 |  |
|  |  |
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| W4Q | DYTELEGSDLEKSIDQTELKVVKLGNGSRVIS |
| UniRei90 UPIO0047935AE | LENLGLSVRIDGKG KVKN |
| iRet90-W4BN |  |
|  |  |
| iRef90_Q5FKV5 |  |
| UniRet90 UPIO0037705EB |  |
| UniRef90-G9WGZ3 | W |
| UniRef90-U1WX | MPDLAGKTVTEGKQALREAGLTAQVLGSGKTVVG |
| UniRee90 UP10002485CAB | DEVPDVTGKSESKAQDA |
| UniRef90 H1LCHO | SVVYNTSUEAKRTLAEKGEDVVTIUGNDGT |
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| Ref90-R5XW | VQV |
|  |  |
| UniRef90-UPIO0046FD8FE | VPDVIGMDMEEAKQVLREAGLEYLADETGTV |
| UniRef90-J9GPQ2 | SVIGMGA |
| UniRef90-UPIO0037B7991 |  |
| UniR | SVTLPDVKDKDLAMAQSTMLIEHKN |
|  | VTVPKLTGMTVAKAKSTASANG |
| UniRet90-R5z30 | TIDSYLJKDI T TVTKGFDEKKI SYLVLGNGSKV |
| UniRef90 UP100038205 | NVPTLTGKTVDAAKKKLDASGITFKVVGTGNKVVK |
| UniRef90-R7EZC7 | DVRNYDARSALRELESLGVKVILRGTGT |
| UniRef90-E5Y419 | TVPDVVGQSVRRAVEMFARQGLVPVIKGNGSR |
|  | KMPKVVGLPVMDAVALLENLGLEVEMDGLGD |
| UniP | , |
| UniRef90-UP1000470566D |  |
| Unip | EKLDVATPDV |
|  | K ${ }^{\text {V P }}$ - |
| UniRef90 M1 GDG1 |  |
| FD986 | , |
| UniRef90-UPIO002FDD986 | ENGIEVPN |
| UniRef90 C2S7X0 | TYVEVPNLIGMKKKDLQTQLVDLKLD |
| UniRet90-W3AD62 | VVGK |
| UniRef90- ${ }^{\text {S9T6P2 }}$ | NYKSKPVKDSVQAIKDRRMHAVVLGKGTQVLE |
| ef90 |  |
| UniRef90-I8SEU7 |  |
|  | THVVVPSVINLLVAEATQELKKSGLSVRVEESGERVAD |
| - |  |
| UniRet90-F5 | EVGNONSPVPAKESLESLGYKPVIGGDGETVIN |
| UniRef90-A3U831 | MPDLRGLPAMDAVSLLENMGMRVQISGTGS VKS |
| UniRef90-B1BYX8 | E |
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| UniRef90 |  |
| UniRef90_G4HE78 | Q FPEPGTPIS |
| UniRef90_UPI0003025696 | A N $\ddagger$ D Y GEPVLS T Q T L L I T D E |
| UniRef90_W7Z2I1 | Q QPQADAKLLNGERVVVKT D |
| UniRef90_A4CPL4 | Q S V K G T K V R E VKRIV |
| UniRef90-R5M3I5 | QYPEKNDTMTSADTLYL ${ }^{\text {Q }}$ T N |
| UniRef90_W8QVN4 | QWPNAGSEFSESQKVFLKT |
| UniRef90-R5W8Z4 | QYPNKKS RVLK G S K V F L K T |
| UniRef90_UPI00047390DC | QSPEAGTKVKEGET |
| UniRef90-D6S4D3 | Q T LA T G Q K L S A G S KVFVLT |
| UniRef90_V9G3J6 | Q YPPPGTPIS G G Q R L Y L L T |
| UniRef90-K9AJM2 |  |
| UniRef90-A3DE32 | Q SVEP GTKIPQ |
| UniRef90-B1 YIU1 | Q I P T R GQEFVS GERVLFK T GR |
| UniRef90_R9LH60 | QFPKAGTT L K S GQFVVLVTEK |
| UniRef90_R5Q833 | Q Y P L A K S KVTS G D KVFI K |
| UniRef90_K8EQ30 | QMPLPDEPVLEGQRAMLLT N |
| UniRef90_E7RHK1 | Q Y PEVGNAVLK G GRVVLQT |
| UniRef90-R7P8J4 | Q Y P L K G K V L A D S K V FL L S |
| UniRef90-W9A989 | A SVEEGESILAHDHVILVT |
| UniRef90-K9EYZ0 | Q SPGQA G Q V A S Q K V L L V T |
| UniRef90_17LE42 | Q GVK K Y Q K V S N G S K V F F L T |
| UniRef90_R5Z3Z3 | Q Y P Y A D D T I S N D HVFVLT D |
| UniRef90_UPI0002E68FC5 | QYPAADETAPQNSTILLLTD |
| UniRef90_C4L5U1 | QSPVK G Q S Y V VGERLLLKKTSE |
| UniRef90_UPI0004769C97 | Q S $\quad$ S K G T DLKKVK K |
| UniRef90_F215T5 | QFPQAGTRRSLDNRVYLLTN |
| UniRef90-W4QP45 | QQPQAGRA LLP GERLFIRTN |
| UniRef90_R7M625 | Q Y P NKD TVLYSNDLVVLLT N |
| UniRef90_L1NVA6 | Q S $\square$ E K N T KVA R N S L V Y L |
| UniRef90-Q03524 | QSPAAGTKVKEGSK |
| UniRef90_K4ZHY8 | QFPQQGEERYEQQPVYLLTSQ |
| UniRef90-M8EGB9 | Q Y PAPYEKVVPGSTVTLVTDR |
| UniRef90_UPI000248CC6B | QS PLDP GTE I G GAQRMYV |
| UniRef90_R7FG33 | QSPSTGTSVTK G G K V L L Y T |
| UniRef90_UPI00035CEC56 | Q S 1 K K G TKI SENQSVNL N S |
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| UniRef90-UPI0003B41122 | Q Y P S A GA SLFPGNRG |
| UniRef90_R7ZGI5 | Q Y P K G K K L VNGS TVF |
| UniRef90_C5NU70 | QYPSAGNVI KQDERV |
| UniRef90-E2SKI1 | QYP QAKETIDSNQRIFLKSD |
| UniRef90-E7MMN4 | Q Y P Q A G S V TT GQKVELVT N |
| UniRef90-W4QAV3 | QQPFAGKSALPGEKLILLTDE |
| UniRef90-R7IFN2 | Q Y P L K N K L L S GEKLFILLT N |
| UniRef90_UPI00047935AE | QS IPA GQK I K N N Q Q ${ }^{\text {P }}$ |
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| UniRef90_UPI000464CCD5 | QFPVVAGTEILPGSLVML |
| UniRef90_G9WGZ3 | Q SVGP S A Q V M GQKI F L R |
| UniRef90-U1WXB3 | Q Y P Q A T A R L T K G T NVYILLT S K |
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| UniRef90-H1LCH0 |  |
| UniRef90-R7NNN7 | QMPESNSTVPK G G TVVLYTDK |
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| UniRef90-UPI00036F60FC | Q P S A G T PVKA GMQVIL |
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| UniRef90_I3E527 | QLP S E NS T MLE GEKI I L K |
| UniRef90_C3L6F5 |  |
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| UniRef90-S2XSD1 | QFPAAGTEI LP GS LV LL K T |
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| UniRef90-T2KP85 | QS ${ }^{\text {QP E GE K I K E N Q KVV L }}$ |
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| UniRef90_UPI000470566D | QYPEEGAPIMPGRPVILMTSE |
| UniRef90-J1H4R4 | Q $\square$ P E S G K S I P Q N G TVVVLM D D |
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| UniRef90-W3AD62 | QYPATGEAVVEGGTVILKT |
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K E M K

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KAES VTVPEVKGKRVKDARKDLEKLGLEVEVQFNGSRVFS YEV ${ }^{\text {Y }}$ ETPSVEVPNL KTSENIMPNVKGQSKDEDVNGYYDFKLDVKVSGSGSKVVK QKVEPKV1GKGLDEGAKELSQAGLTVIKLGQTGSVTK HRSK
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TWKMADY VTVPVVGRSQQEAAALLQQAGLQVQV NGDRVIR TVPNVVGKTASDAKAALKKAGLSVVIGKNWTVTK
STKTTASFVDQGRDDAVKEAKAAAFTPVALGNGETVTA ETST VTVKFVELKDQEAKSKAYRDSVTLEII GEGDTVI D KSKKTTVRNVTGWPTADAVKVFKNLKI NYEVIGTGEVVKY KSKKVELPNLVGMTVKDAKDALTSLGLNVGAI GAGDDITQ KTEGVQVDNYIDETIEQTTESLKDEKLSTVMIGNGTQIDD KAAKYKMPDLTGMNVMDAMALLENMGLRVKFSGEGKKVSS VPDVLKLKIAEAKEKLTNQGITFDTIGKGSNIVR ETRAQAPDLVNKGLKEAQTQLDDAGIAYENLGKGTKVMK TTVTTPQVTGYTVADAAVRLEKKNLTYRTVGTGDVVTS ETQVKVPNVVGMTQSKADAKLKESKLDYEVQGDKGKVVD


E V P D V K G K S F L L N A E S D L $T A D Q D Y T G Q H A E A D Q V E L A N D G L N P V I V G A G G E V L E$ E S GFKTKNYVGQSPTDVREILAAEGI EGMILGDGLTI EA $K L S S V K A A D Y T G Q S M E E T A N V L I K A E G I V V I Q Q G S G T \quad I \quad R N$



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| UniRef90-UPI0002626BFB | QAPSPGTKI EQGEKI I YLS DK |
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| sol0 |  |
| jhmm | $\rightarrow>$ |
| jpssm |  |

