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RHVVNQ VPGCKHA
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| UniRef90-14X2B8 | L Q R I A H A Q Q K R GVIV F T D P D Y P GRR | RA I E E HVPPQAKHA |
| UniRef90-U7UH98 | I NTLK S $\quad$ T K K R G I I I F T D P D Y M GEK I | RRDLTK T I P GAK Q A |
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| UniRef90_UPI0002D9F26B | I E NIV V ELLE Y K DVYI F A D A D E A G E K L | RKQFQREL P N A T H |
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| UniRef90_C8NIP9 | I AL I QKALLQTREVIVEFTDPDYPGTRI | R NII Q E HVPGVKHA |
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| UniRef90-V6Z1S9 | L E RI E R L H K L R GV I V F T D P D Y S G E R | R R II M D A P TVR H A |
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| UniRef90-H7CZM3 | I ERIIKEAQK R K GVI V F T D P D F A GEKI | R S I I S K V K G VK HA |
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| UniRef90_L0F1A5 | L HFi A EAA QRRGVIVET DPDSVGEQI | RERI SQRVPSAKHV |
| UniRef90-R7 | L S LI K T A A K R G V I VLT DP D Y P G T Q I | R N KV $\mathrm{D}^{\text {Q A V P N A K H A }}$ |
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| UniRef90_L7WZF7 | I AVI K Q A Q ETRGVI I LT DPDFPGDKI |  |
| UniRef90_D6S3D1 | \|LALI K K VA Q K R El I V FT DPDFNGER | T CAVP T AKQA |
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| UniRef90_UPI00037/ | L D R I A HAA NTRGVIV F T D P D K A G K H | R S VI ERHIP HVK HA |
| UniRef90_M8DB75 | A A LEEQLEKEEEI YI FT DEDDS GK K L | R S QL Q E F P N ATHLL |
| UniRef90-E6U3K4 | $\square \mathrm{L}$ A L R RLA EKR GVLI LT D S D A A GFKI | $R G F L S G A L P Q V R H A$ |
| UniRef90-W1Q3L2 | LA QIVEAARTHGII VLT T P P D Y Q GERL | R R LV T Q AVP S AK Q A |
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| UniRef90_U5FAV8 | L RLI E Q A A K TRGVI I FT DPDHPGET | RTAI NQKI PGCKNA |
| UniRef90-R7A8H5 | LERI K EA Q RVRGVIVET D P DRPGEH | R R WI Q D NVPG $\square$ K HA |
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| UniRef90_UPI0002 | IDRAK LAAKQRGVI I FT D P D F N G Q R | R NII T KVIP T A K Q A |
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| UniRef90_D4S775 | I KNI RAAYEKRGI I I LTTDPDTVGER | A |
| UniRef90_K9AFR9 | IEII Q NARETRGVIVLTTDPDFPGDK | R A II E E HVP GVK H A |
| UniRef90-F21732 | MDKI K Q A Q D LY GVIVEFTDPDVS GEKI | RRTI MRDVPEVQHA |
| UniRef90_R5A5T4 | LQ Y L R ELA EKRGLIVLT D S D GA GF LI | R HKL S S CI NQLK H A |
| UniRef90_UPI00037A | LE R I E T L H D L R GVI V F T D P D Y N GER | R K I I S S Al P TVVK H A |
| UniRef90_R5VCE0 | M D Y L KEL S K HRNLII LTIDPDYPGEK I | R NTI A Q Q I P N CKHA |
| UniRef90-A0A024QB |  | RKQLARELPHAN |
| UniRef90-I7KN93 | LA K V K Q L S Q T R EI I I FFTDPDFNGERI | R R L V T E AVPTAK Q A |
| UniRef90-M2Q681 | I ELI K T A A K T R GV I V LT DP C Y PGMQI | R NKIVNEIPLVKHA |
| UniRef90-N0AXZ6 | L D EL D D S V EK DVYIL VDA DEA GEKL | RKQFKKEFPEAEHLL |
| UniRef90-D0BLR0 |  | R S I D E A I P T V HiA |
| UniRef90-K2GFW1 | L DELDYEY DHRNVYI LVDED Y S G Y R L | REQFREELPHAVHL |
| UniRef90-D0GIX8 | L GKLS S L A K N N DL I L L T D P DFA G K K I | R SVVEKRIPD $\mathrm{V}^{\text {V K H A }}$ |
| UniRef90_UPI000467 | L ELI R Y Y A K K T GI I I L T D S DAA GRR | $R \mathrm{GY}$ Y K G A V G S GKNV |
| UniRef90-K1M470 |  | RAII R Q A YP TVK H A |
| UniRef90_D7N825 | I K TL Q E IN K R R GII I F T D P D Y M G K K I | R A DLS K H L K G AKHA |
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| UniRef90-X8IRK6 | WALI EKAYDELLGI I I MT DPDYS GEEI | R R R L T A K FPNALLHA |
| UniRef90-H3NL95 | L N ELVLLLQEKRGLI I LTT DPDYA G K R I | SNII REYVPNAKFA |
| UniRef90_17LP07 | L E R I ERLH D L R GVI V FT D P D H S GER | R R I I M T A I P TVK H A |
| UniRef90-K0DCS7 | L ERI K LAEK TRGVII LT DPDFNGQRI |  |
| UniRef90-H3NIY0 | IERIIR Q A HQQY GAlv F T D P D Y A G Q R L | R R KI R Q AVP P $\square$ K EA |
| UniRef90-E4K | QK QI SHAAQEFGII I FTDPDYQGDRI | RRLI T Q AVPTAK Q A |
|  | IE R L I Y L E K T R GI I V LT DP D Y A G K R I | RNI I TNNIP T A K H A |
| UniRef90_K2PKK4 | I ERLLKVLQEKRGIVVETDPDFQGERII | RKII MQA I P EAQ HA |
| UniRef90-R8W570 | LS MFRQLSKKRGLLI LTD S D GA GLVI | R N Y L K G S I P Q VK HA |
| UniRef90_UPI000225B5C5 | F D EMLIE T Y D E K DVYI FVVDEDK S Glikl | RKQLS L L P HAEH |
| UniRef90_S7U010 | FRKIA FARQRKGVIVLTDPDRPGDQI | RKRIN D R V P G CKNA |
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| UniRef90-R6HUN2 | QKLI K RLA Q T R GIV VILTDSDSAGFKI | R S F I G G SVP K V I H A |
| UniRef90_F9DV91 | $\square E R$ R HAQK T R GVI V F T D P D F P GR R I | R A V V E E Q V P GVK K A |
| UniRef90-E8JX64 | IERI R R L Q D L H GVI VFT D P D F N GERI | R RLI M TEIIPTV Q H A |
| UniRef90_R6R1R3 | QYLI RELAKKRGI I VLTT DS DSA GFVI | R N FLK G SVPQlK H A |
| UniRef90-R6P3P4 | LQKI R A L A ERQGI I V L T D S D S A GFKI | RSFIGSTVDNGKNA |
| UniRef90_G8 | LEVI R NAQQSRGVIVLTDPDFPGDKI | R S T I T E HVK G VK H A |
| UniRef90_UPIO00466DF43 | LDLI KEASKNRGI I I L T DPDYPGKK I | Q I Q A AVPNCKHA |
| UniRef90-J4WD38 | QDLI KKAST】GNI I I LTTDSDYAGET | $V E K \ A Q N C K H A$ |
| UniRef90_F8I7X0 | $\square \mathrm{D}$ ALKKMARHRTVVLMTDADAAGRRI | K EVFPDADD! |
| UniRef90-R5X9Z7 | RDFI R R L A K ERGLI I LT DS DHS GFQI | RNFIANCAKGVKHL |
| UniRef90 UPI0002F2 | LAAI R L A NEKRGVI I F T DPDAPGNK | R D A I NKAVPNCKNA |
| UniRef90-UPI0003F96 | L REI EV A L | ARFPNDKEA |
| UniRef90_R7FC38 | MALI QYYARTTGVIVLTDSDRAGFQI | $R N Y L K G A V R D G K H V$ |
| UniRef90-R5DDQ1 |  | $R$ NHLK G V L P Q I L Q A |
| UniRef90_D5T4T2 | VRAK Q A A E T R I I I LT DPDFNGQRI | $R Q 1$ M T D AVP T AKQA |
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$\square K L K Q A L V V E$
$\square K$ K Q A L V V
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$K K I D A V I V V$
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NQ I V VM N Q$\mathrm{M} \square \mathrm{H}$M $\square$ H T D R V L K T I FI

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| UniRef90_R5J084 |  | L K S A L ${ }^{\text {\| }} \mathrm{P}$ |
| UniRef90-D6XV39 | LERIALLALGRRGVIVFTDPDYPGDQ। | RKII D REVPGCSHA |
| UniRef90-F0SW69 | I A Y L R E M AVRRGVIV C T D P D FA G K T I | R D RI S K CVP GVK HV |
| UniRef90-D4YHK6 | L LEI K K A H EL H GV I V F T D P D $\square$ S G T K I | $R Q A V V D A V P G V Q H A$ |
| UniRef90_UPI000346 | L ERIIKQLHDLH GVI V F T D P D F N GERI | RRLI MEVVPSAQHA |
| UniRef90_V9GMM5 | LKRIA A L A Q ERRGII I LT DPDHAGERI | RKIV D Q HVP G CKHA |
| UniRef90_F811A6 | QK TIIERAAKTRGVIVFTDPDFNGERI | RKIVTQ I APNAKHA |
| UniRef90_R7BDX0 | LDFI K R L A NERGI I V DT D S D H S GF Q | R NYL S S All P K |
| UniRef90_UPI000472F88E | L I KI RHAQETRGVIVFT D P D Y P GR R | R A I I E Q Qif e var A |
| UniRef90-F2F6L9 | L I DL LE GYEQDEI I TMF D A K N GEK | R K L M N R A Y E AQQL |
| UniRef90_R9LHE1 | L HTI R M L A EK D GI I L L T D S D A A GFRI | R G Y L S G AVVPRVT HV |
| UniRef90_R6UJD2 | $V N L I K Q L A Q K Q G I I I L L T D S D S A G F L$ | R NHLR G IV P Q I K N A |
| UniRef90_G4L558 | I ERI DHAQE T R GVI V F T D P D Y S GEKI | RKII MAEI P D AK HA |
| UniRef90_KOIV46 | L D Q I Q H A K K R GVI I F T D P D P G Q i I | R HII D Q A I P G CKHA |
| UniRef90-W4Q743 | L E SLILPDE D K DVYI LVDEDEAGES L | R K R L N ELPNATHL |
| UniRef90_G4D4P5 |  | RNDIS S QV K GVKHA |
| UniRef90_J0WYB4 | MA LI R R M A ETRGLLI L T D S D S A GF | RHHLMSAI PEIKKHA |
| UniRef90_D8ME81 | 1 K RAQYAAK T R GVVI I L T D P D F N GQRI | $R \mathrm{Q}$ ¢ M T T A V P LA K Q A |
| UniRef90_R6ISA2 |  | R N Y I A K GL Q QVK H L |
| UniRef90_UPI00047565F8 | I E RI E RLLH QLR G V I V F T D P D Y S G ER | R K R L M T A I P TL K H A |
| UniRef90-K1LK12 | LQRIIKRAQEQF GVIV FT D | RRTI $\square$ R AV P Q AKEA |
| UniRef90-Z4XEC4 | I Q R I K H L H NLH GVIVET D P DVNGER | A |
| UniRef90_UPI0002195 | IERI R L A A ERRGVIVLLT DPDFNGNR | R QLI L A A V P TVV VMA |
| UniRef90-R7KVC9 | MKLI RHYAEKKGI I I L T D S DAA GFK | R N Y L K G S V G N I NV |
| UniRef90_UPI0004658 | LSLI K K 】 N E NQGI I I FFT D P D GP G K K | REKINNYVGGTKNA |
| UniRef90_R6MMH7 | L E SIIK K M A DET GIV I LT D S D S A GF KII | R N Y I K Q S L P K V K H A |
| UniRef90_R6R1E3 | I A Y I D E L S K $\square$ R KVI I FT D P D Y P G T Q I | R NKI A S KVK NVY H A |
| UniRef90_K0NPK4 | $L A K L K K L A Q N R E I I V L T T D P D V N G E R$ | RRLLVTKAVPSAKQA |
| UniRef90-D2MN05 | FQRI E EAIDKKTGVIVEFTDPDTPGNQI | RFKI K ERFPMIKEA |
| UniRef90-A6NRM3 | LSLLRRLLARERGLVVLT D S D G A GFVI | R NFLK GA $\mathrm{l}^{\text {Q Q V K H A }}$ |
| UniRef90-F9MV | I D TL QLA Q K N R GVI V L T D P D Y M GEKI | R K DL D K R V P G I K H A |
| UniRef90_UPI0003B6D7BF | LA QI KRAQASRGVIVFTDPDHAGERI | R R II SREIE GVK H A |
| UniRef90 UPI000307914A | MDEI EVALSSTRGAI I F T D P D F P G H K I |  |
| UniRef90_UPI0004001B94 | L RELERASRTRGVLVLT DPDGPGER | RRRI A A RVP C CKHA |
| UniRef90 ${ }^{-}$X0PQN6 | LALI K Q A Q VTR GVIVET DPDQPGEK | RKTIMAAIPEVEQA |
| UniRef90-R8AIM2 | I D NMIE T L Y D K Q V YVLA D S D D |  |
| UniRef90-UPI0004721 | L NLIN Q I NQSRGI II FT D P D |  |
| UniRef90-E6UAG7 | V KLI Q M Y N S V V L I I LT D S D T A GQQ | R GRIIKS IVGDAKNV |
| UniRef90_D4L916 | QSLIRRK L A E T R GIL L I M T D S D G A GFVI | R NFLK G S V D $\quad$ DK N C |
| UniRef90_UPI0003635602 | LA L CKKMNEERGI I V F T D P D GP GEM | RRRI 1 E EVVGSCKHA |
| UniRef90-E3BRT1 |  | R K I I L K AVVP TAK Q A |
| UniRef90-R6N0K2 | QSLI RKIA Q T R GILVFTDS DSAGFVI | R NFLRGTV DK $\square \mathrm{KHC}$ |
| UniRef90_UPI000479447A | LRELERASASRGVIVLT D P D GA GERI | RKRI G SRI P H CKHA |
| UniRef90_G7W7D2 | LD Y A EMANRQGVIVEFTDPDTVGEQI | R NRI R A HV P Q K K H V |
| UniRef90_G2S089 | L DLI KEFNNTVGI I I F T D P D GP G K K I | REQI DA Y L D NVLNA |
| UniRef90_U2RC56 | I NKIVELSRNNDLIL F T D P D F A G K K | P NIJKHA |
| UniRef90-J9HQY4 |  | DRLAPGCKHA |
| UniRef90-R6NA77 | I ELLRRRLAD TRGLLILLTDSDSA | RNHI QSClP K EKHA |
| UniRef90_Q8EUI2 | 1 NEI IS I S K K R GI I L FLDD P D LP GEK | RKKLMESLPEAKQC |
| UniRef90-G9RXY9 | KRLLVELGKKRGI I V L T D S D DA GFR |  |
| UniRef90_UPI0003B69A31 | L R R I E L A R E R R GVI I L T D P DVP G E R | R R IVSRRVPGCK H A |
| UniRef90_UPI0003650082 | L K El EV A L A TRGAII I F T D P D FP G H K |  |
| UniRef90_Y7Z018 | L D D M I E S L Y D K QVFVLA D S D D E G D R | R N WFKRYLS E S E H $\square$ |
| UniRef90-R5H0X9 | QELI K S LAA K T GI I I L T D S D S A GF Q | RSFlR S IV K Q GENA |
| UniRef90-L1QJ28 | $\square A R I K E A Q K R K G V I V L T D P D F A G E K$ |  |
| UniRef90-X8K2J5 | WKKLDNAYETKGLIVMTDPDHAGRK | RERI CARYPDAKQA |
| UniRef90-U2EBM | LQLI K EARDKRGVI I F T D P D Y P G K RV | RR II NEYVP G C $\square$ N A |
| UniRef90-P7 | 1 N L I K A VA K K Q PVI L F LDP DVA GQK | RRQLEQHLDKYESC |
| UniRef90_R6RF98 | TELI R TLLASTCGIVI LTTDSDSAGLKK | R NHIK GCCKNII NV |
| UniRef90-C8WQL6 |  | $R L D Q L V P G L L H A$ |
| UniRef90_UPI000289D0BC | $L Q R I Q H A Q D V R G V I V F T D P D Y P G R R$ | R A I I E ERVK G I K H A |
| UniRef90_R4UCF9 | LALLI K K L S LTNKI I I FTDPDYPGQKI | R DIVSSYL N N C Y HA |
| UniRef90-R5N0C1 | QKLI R R L A ETRGIL L L T D S D S A GF T | R S FL N G V P K EQ NV |
| UniRef90_R5XY04 | QKLI RKLAETKGI AIL T D S D S A GFVI |  |
| UniRef90_G9WER0 | LA MI D Q AS QQHELILLLTDPDFQGERI | RKIVSQRVPTIIRQA |
| UniRef90_L5L8R1 | L E M I K ELINNK T GVII F T D P D G A G K K | R Q TI 1 D Y L D NVL NA |
| UniRef90-M1Z369 | I E EL I LPVVEQEEVYI F VID A D E A G M K L | RKEL KQLL P N AKHL |
| UniRef90_UPI00047D63C3 | L EFI KKANQQT GVII F T D P D GP GK K | REQI I G FLT K V A N A |
| UniRef90-Q1WSC7 | I ERI QRLHELLH GVIVEFTDPDFNDERI | R R M I I T V I P T V Q HV |
| UniRef90_R6GXT4 |  | $R N Y L K G A I P Q L K Q A$ |
| UniRef90-C7UCS3 | L T Qi EHA Q E T R GVI I FT DPDYS GEKI | RKTI MEVVPDAKHA |
| UniRef90_K4KQ01 | LEYI A EMAERRGVIVCCTDPDFAGKQ I | R I N K Ril P K A R H V |
| UniRef90-C0E8U0 | RALI K S LA H GPGIV I LTT D S D T A GLLVI | RNFVKSA A G G GKNV |
| UniRef90_U2QTZ0 | I E KL K A L S ERNDLI L L T D P D Y A GKKI | R A VI EKNIP N I K HA |
| UniRef90_R6CB15 |  | R A Y I K Q L P KVLNL |
| UniRef90-C7H0K7 | FRKL D S A Y K E R GFiv F T D P D F A GR Ni | RKTLKE RYPEALHA |
| UniRef90-D3FHB2 | \S L I K E L S LT R GVI L F LD P D Y Q G K K I |  |
| UniRef90_D4LCD0 | MALI RYFAAHTGI I I LTD S DRAGFKI | R G Y L K G CVVPK G K HV |
| UniRef90_UPI00047C9033 | LE FIM R L S K K N K I I V F T D P D GP G K R | RETIN NYL G GVF NA |
| UniRef90_R7DQW4 | $L \mathrm{R} Y \mathrm{~L} K$ QI S Q T R DI I V LT D P D F P G L Q | R S RIEEQIP TVVYHA |
| UniRef90-R7NGN4 | Q NLI R Q L A NKRGLLI I T D S D S A F Vi | R NFLK K IV K D I K Q C |
| UniRef90_UPI0004789F31 | LEFFIK KVVNDEDGVI I FT D P D GP GK Ki | RERIDNFLD GVVNA |
| UniRef90-T0CL20 | M DVL R R AVRTR GVIVLTDPDGA GERI | RRRI DRAVPGCSHA |
| UniRef90-B5ZAZ9 | LALIK Q A Q L S K GV I L FLDP | T NYLK Y G K Q C |
| UniRef90_E9SBS4 | KL DQMYARTGLVILTTDSDSAGQQI | $R$ I K S L V G D A ENV |
| UniRef90_D5WRH0 | I GFLRKVAAERGVI I LTT DPDAMGER | RTRIA D RVVPGCKHA |
| UniRef90_W0GMZ1 | LQRI K Q L S LT HQ I I I F T D P D Y P GQ K | Q V V D Y L G C S H A |
| UniRef90-U4KQX0 | $L \mathrm{~L} R \mathrm{~L}$ K ALLSKDNQMILELDPDHAGERL | R RIL S K ELA NVVHA |
| UniRef90-D4K892 | RQQLRALA QKNGLILLTD S DAA GFRI | $R N Y \mathrm{~T}$ T M V Q C V V Q A |
| UniRef90-Q04DR7 | LDLI EQSARDHELILLTDPDFQGERI | R K I V L R R P NI K Q L |
| UniRef90_R6TFA0 | AALI RYYAQHGGI AI L T D S D T A GFCI |  |
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| UniRef90_R5J084 |  |
| :---: | :---: |
| UniRef90-D6XV39 | FLPKADAGI EHAGYRALQEAL |
| UniRef90-F0SW69 | YLPRKEAGI ENASLEDI RKAFLK |
| UniRef90-D4YHK6 | Fi ERDEAGVEHASDSAI EKA |
| UniRef90_UPI000346A354 | FLKPDEAGVEHASYEDLKTALEQADFD\SKKDL |
| UniRef90-V9GMM5 | FI P EKEA |
| UniRef90-F811A6 | FLTKDQAG |
| UniRef90_R7BDX0 |  |
| UniRef90_UPI000472F88E | FLTRKKVGIEHATD |
| UniRef90-F2F6L9 | II PHEYIEVEKTPTK\LRD\LDRAKFLVKE |
| UniRef90-R9LHE1 | YıPDLF G GVE GVPTKLLLE |
| UniRef90-R6UJD2 |  |
| UniRef90-G4L558 | FLPRDKAGVEHASDEAILAALQQVATPSKENDLL |
| UniRef90-K0IV46 | FLTKDEAGI EHATKASLEAAL |
| UniRef90-W4Q743 | YTRKEYGQVET T |
| UniRef90-G4D4P5 |  |
| UniRef90-JOWYB4 | Y I P D GKLGVE GVSKQQI LEALDRAGVLCEEESV |
| UniRef90-D8ME81 | YI TQSEGGVEHAEPNILRQA |
| UniRef90-R6ISA2 | Y I P DVY G GVE GVDDSVLA ALFDR |
| UniRef90-UPI00047565F8 | FLNQSEAGVEHASFEDLEKAL |
| UniRef90-K1LK12 |  |
| UniRef90-Z4XEC4 | FL R R E A GIEHASYEDLKAALSQVNFEKK T D F |
| UniRef90_UPI0002195DBF | SI SRDQGGVEHASPNDLRS |
| UniRef90-R7KVC9 | Y I P D DFGGVEGMSEEVLLEAFRRAGVN |
| UniRef90-UPI00046580CE | FVEKKK\GI A EANPEDIKNAL |
| UniRef90-R6MMH7 | YVP DVYGGVEGDK D D I LD S L K K A G C T DD |
| UniRef90-R6R1E3 | YV D R NKAGI A ETEKEEIL L AL S NYV |
| UniRef90-K0NPK4 | FI TRDEGGVEHASKAALERALSDLH |
| UniRef90-D2MN05 | FI PKNKAGVEHAKAKDLQESL |
| UniRef90-A6NRM3 | Y 1 P DLF G GVEGMRPQVLEEALRRAGVT |
| UniRef90-F9MV66 | FISTENIGVENAKPQAI DEALERA |
| UniRef90-UPI0003B6D7BF | FLAKRKVGVEHASPDAI RAALRSVRTE |
| UniRef90_UPI000307914A | FLPRDKAGVEHASIESIRESL |
| UniRef90-UPI0004001B94 | FLPRKLAGVEHASGEAlVEALRRAR |
| UniRef90-X0PQN6 | F L P K G T |
| UniRef90-R8AIM2 | YVDKTFCEVAKCPKNYDAHVLSRYGFNVKKE |
| UniRef90_UPI0004721D73 | F VKKK $\mathrm{V}^{\text {GI }}$ A EADDEAI KQAL |
| UniRef90-E6UAG7 | YCPVIF G GVEGMSVDVLREAFEKAGLNSDEEII |
| UniRef90_D4L916 | Y IP Q K G GVE GVSDEVI I NAIRKS GAE\\|IGE |
| UniRef90_UPI0003635602 | SLKKQKVGI E HADKADII DAL |
| UniRef90-E3BRT1 | FITRKEGGVEHASKAALQRA |
| UniRef90-R6N0K2 |  |
| UniRef90-UPI000479447A | FLPRREASVHGLGVEHASDAA |
| UniRef90-G7W7D2 |  |
| UniRef90-G2S089 | F I TKKKIGGLAQADEHSIKNALSK |
| UniRef90_U2RC56 | FI S QKDAGVENANDEAI LDALKNAHQNVENRF |
| UniRef90-J9HQY4 | YLPRAKAGVEHARSEDVKCA |
| UniRef90-R6NA77 | Y I P DLYGGVEGDDPE\\|LLESURRSGASADEE |
| UniRef90-Q8EUI2 |  |
| UniRef90-G9RXY9 | YVPA ${ }^{\text {P }}$ G GVEGVPSEAILRALQTAGAREKAK |
| UniRef90-UPI0003B69A31 | FLTKGKAGVEHASAETI REALSHVRS |
| UniRef90-UPI0003650082 | F L L R ELA Gle He D P D D K E S L K VVHTS V |
| UniRef90-Y7Z018 |  |
| UniRef90-R5H0X9 |  |
| UniRef90_L1QJ28 | YIA QEDGGVENAT P EVI I EALKRAKVTVE E |
| UniRef90-X8K2J5 | FLTNGD\GI ENARPEDIVNALKLAKC |
| UniRef90-U2EBM2 | Y I DKKKVGIE HCTE $\square$ DIK K A L |
| UniRef90-P75045 | FIA RKDI GVAEATDAALDQAL |
| UniRef90_R6RF98 | FVPPGYLGVEGLD TE ELESALKKAGVA |
| UniRef90-C8WQL6 | HL RKASAGIEHASAEDVRRALIEAR |
| UniRef90-UPI000289D0BC | F L P K K K |
| UniRef90-R4UCF9 | FI DKNKAG\A QAS DEDワK |
| UniRef90-R5N0C1 | Y I P D 1 F G GVEGVK S DVI DDALKK A GFDVDAES |
| UniRef90-R5XY04 | Y I P D I Y G GVEGIS A EIL KEAFKKA G $\square \mathrm{GV}$ |
| UniRef90_G9WER0 | FLQKSEGGVEHADPAILLRKLL |
| UniRef90-L5L8R1 |  |
| UniRef90-M1Z369 | Y TRK |
| UniRef90-UPI00047D63C3 | F TEKKK\G\AEASEAATKQAL |
| UniRef90-Q1WSC7 | FLKRDEAGI EHASYEDLKTAL |
| UniRef90-R6GXT4 | Y I PDMFGGVEGMKPEVLLEALHRAGATFEGE |
| UniRef90_C7UCS3 |  |
| UniRef90-K4KQ01 | YL SVED\GLENVSSEETRKAFSK】 LIVKI |
| UniRef90-C0E8U0 | Y I P Q L G GVEGMTEQVLLQALLERAGI |
| UniRef90-U2QTZ0 | FVSRKNAGVENASDDAI REA |
| UniRef90-R6CB15 |  |
| UniRef90-C7H0K7 | YI SKGNDGI ENADVRSITNALSRA |
| UniRef90-D3FHB2 | FIDSKKKGIAEASNEAVLSAFN |
| UniRef90-D4LCD0 |  |
| UniRef90-UPI00047C9033 | FVSKKKlGI A EADDEAIKKAL |
| UniRef90-R7DQW4 | YVRKEKVGVAESTKEEVLSALENVMDKSKKK |
| UniRef90-R7NGN4 | Y I P Q G Y G VE G $\square$ S DEEI I NAI K R S S A $\square \mathrm{E}$ GE |
| UniRef90-UPI0004789F31 | FITKEKIGVAEANEVAI KKAL |
| UniRef90-T0CL20 | HVPRRQAGVEHADATAVREALLRARGQV |
| UniRef90-B5ZAZ9 | F $\$ SKKK $\square \mathrm{GI}$ A E A N NDAL C K A L K S Q |
| UniRef90-E9SBS4 | Y CPVIA G GVEGMSVQWLREAFEKAGDAGEAE |
| UniRef90-D5WRH0 | F TPPEEAGIEHASPSAI DRALARVRAEV |
| UniRef90-W0GMZ1 | FI DKNLAGI A Q A D Q T I K K ALANVHFNSNHE |
| UniRef90-U4KQX0 | FL D QEK\GIIEHASTNDI QNAL |
| UniRef90-D4K892 | YVPA\HGGVEGVDDALVRQALLDA |
| UniRef90-Q04DR7 | FLNKI D G GVEHADP |
| UniRef90_R6TFA0 UniRef90 J0SDP3 | YVPE\\|F G GVE G VPA D $\square$ I R E AFEK A G $\square$ |

UniRef90_P47303 UniRef90_Q660P6 UniRef90-W6ABU9 UniRef90_D1AXH1
UniRef90_R7GK06 UniRef90_G4ELT8 UniRef90-R6DHD3 UniRef90_G5H3W8 UniRef90_V5RK27 UniRef90-R5QGF0 UniRef90_R7CTJ5 UniRef90-UPI0004066A21 UniRef90-W6AI65 UniRef90-Q14QK4 UniRef90-WOAZC7 UniRef90-D1PKP8 UniRef90_UPI0003B56305 UniRef90-Q6F2B5 UniRef90-A9NE78 UniRef90-W7CMN7 UniRef90-UPI00047C3E51 UniRef90_A0A024HWG1 UniRef90_UP100046FE6D5 UniRef90-R7FVD7 UniRef90-S5M106 UniRef90-U4KSI1 UniRef90_UPI00017F5AF2 UniRef90-R7EVU5 UniRef90_R6TYM6 UniRef90-c9MVZ1 UniRef90-H3VQ62 UniRef90-K1TCP7 UniRef90-R6X9B9
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UniRef90-S5M8K4 UniRef90-UPIO0046919B8 UniRef90-A0A023RIJ8 UniRef90-B8E799 UniRef90-F2F5C5 UniRef90-K8EKN4 UniRef90_E8R7A9
UniRef90_R5ZAB9 UniRef90-D5U312 UniRef90-D8TN45 UniRef90-UPIO0037A14DD UniRef90-EOSS22 UniRef90-V4LM61 UniRef90_K9RU56 UniRef90-B6W7P0
UniRef90 Q8TXP3 UniRef90_Q00ZU3 UniRef90-D3RYM2 UniRef90-KOIC05 UniRef90-M1XQW4 UniRef90_U1P3A6 UniRef90-IOA2G5 UniRef90-P95980 UniRef90_I3TCZ7
UniRef90-MODD16 UniRef90-F8AP02 UniRef90_UPI00046FECCE UniRef90-A2BL78 UniRef90-A8MA86 UniRef90-LOABI7 UniRef90_UPIO003822DE0 UniRef90-A1RXH8 UniRef90-X0YH89 UniRef90_UPI000348D943 UniRef90-Q2FLB2 UniRef90-TOZ9X8 UniRef90-W0K5R8 UniRef90-UPIO0036C0C4A UniRef90-M0CJT8 UniRef90_S6A5I2 UniRef90_Q7VCl3 UniRef90_A0RTV7

VIVVEGKSDQQR LIA LVDRLQTDATGGSVSEAV

$M N P!I V V E G T T D F T K \prod K Q V G Y K Y C V K T C G F C D S R E T$ KADTIIVVEGRSDVNTLLRYGYTNVIAL GGAREKV
MNKY LYVVEGKTDVAK LK N LLGAEYVLKTDGFNVSSSGV MVRCERVIVVEGRYDKIKLSNLVEGTLIPCGGFSLNEGK VILTEGHATAASVKEIVGEGYQVLCVFGTNNVKP

 $V A I V E G E H D F D A L L S H K W E G P V L A T N G Q L S Q E Q$
 KSEELILVEGRADVINLLRYGYTNTIALGG
 KADTGLVVERADVINLLRYGDNNVVADGG EEVILVEGRADVI NLLRYGYTNVIGI E KS DTI

YALAAEEM
GVK $V$ P Y S
$G A H G S K V$
$G G A K E K A$
KQDQA $\| V E G Y F D V I A L H R A \emptyset T Q A V A T L G T \quad G G L S K E Q$
 $V$ I VEAGADVRAVRSRGGAKVLAI RHRGAFRDER
 VIIVVGRSDEKAGKEM GUHGEVRFAS ISSD VIVVEGRADVAQLLQHGliKNAIAVEGGTNVPDA

 I VVEGRADVLTLLRYVKNAVGVEGTN I IVVVEGRADVINLLRCG 1 KNA AAVEGTS DPKS $V A L V E G E H D L L A L V E H G W Q G P V L A T N G Q L G Q S Q$ K S DEII V EGRADVI NLLRYGYRNVIALE G
 K A D

NEIIVVEGRADVVNMLKHGYRNVI ALNG DTVILVEGRADVQNLLRHGYKNVIAL GGATDPK S




 DIVVEGRADVLQLLKYGDKNAIAVE

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| UniRef90－P47303 |  |
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| UniRef90－D1AXH1 YVSREEAGVEN【DNKKI Y E | YVSREEAGVENDDNKKIYE |
| UniRef90－R7GK06 | FIKKSDCGVEHATSEEIK |
| UniRef90 G4ELT8 |  |
| UniRef90 G5H3W8 $\quad \mathrm{FI}$ |  |
| UniRef90－G5H3W8 | F PDGD GVEQAAPDAVRAALAKVR |
| V5RK27 FUNKKUGIAEADENEIKRA |  |
| R5QGF0 | PKEKRGVEGTDAEKLREV |
| UniRef90－UP10004066A21 FLEREK丁GLEHLDS D D Di KEVFKN |  |
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| iRef90－UP10003B56305 FLRRQEAGVEHASDIAA CQA |  |
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| UniRef90－A9NE78 $\quad$ FVQKKKIGVEHLLSLEDLKTML |  |
|  |  |  |
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| UniRef90－AOA024HWG1 | FINQRKNGIAEADDEAVIUAF |
| UniRef90－UP100046FE6D5 FIQREKAGVEHLS Y K DLK |  |
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| UniRet90－R7EVU5 |  |
| UniRef90－R6TYM66UniRef90 C9MVZ1 |  |
|  |  |  |
|  |  |
| UniRef90－K1TCP7UniRef90 R6X9B9 |  |
| UniRef90 R6X9B9 | YAPDGLLGVEGIIDVKTLRTLL |
| UniRef90 E1TSY1 Fil ${ }^{\text {a }}$ |  |
| UniRef90－UPIO0046F8F9D Y R R H A Gl EHAQLETLREVL |  |
| UniRef90－D3XCC8UniRef90－K1TKZ7 |  |
|  |  |  |
| UniRef90－W7CTB2 FVKRSDAGVEHASPEDIREA |  |
| UniRef90－B1HWK7 RTMPTYKEVETTPRKVLAMDLLRAHFSTHNEYIL |  |
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| UniRef90－D2Z440 |  |
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| UniRef90－S5M8K4 | KVDRMFRGVEYCSDEYLKELLE |
| UniRef90－UP1000046919B8 TLPKDQG |  |
| UniRef90－A0A023RIU8UniRef90 ${ }^{\text {B8E799 }}$ |  |
| UniRef90－B8E799 |  |
| UniRef90 K8EKN4UniRef90 E8R7A9 |  |
|  |  |
| UniRef90－D5U312 | FVARAGREVEE酎GRETEEAL |
| UniRef90－D8TN45 FLRVEQGGVEHASPEVI RTSLV |  |
| UniRef90 UPIooo37A14DD R AP PG K EVEELS M K EV VE A |  |
| UniRef90－V4LM61 RAPKG MEVEQLTGKEUARA |  |
|  |  |  |
|  | Y पDRKKAGVENASKEDTIEALKN |
| UniRef90－Q8TXP3 KAPKG KEVEELTRKE】KRALER |  |
|  |  |  |
| UniRef90－Q00ZU3UniRet90－D3RYM2 |  |
| UniRet90－K0ICO5 R P P P REVEECTPTETA |  |
| UniRef90－M1XQW4 RAP EDRSVEDLDRHEVMTA |  |
| UniRef90－M1XQW4UniRef90－U1P3A6 |  |
| UniRef90－10A2G5UniRef90 P95980 |  |
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| UniRef90 UPIO0046FECCE |  |
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| $\begin{array}{ll}\text { UniRef90－A1RXH8 } \\ \text { UniRef90－} 0 \text { OH89 } & \text { RAP P G R A VE }\end{array}$ |  |
|  |  |  |
| UniRef90－A3MV08UniRef90－UPIOOO348D943 |  |
| UniRef90－Q2FLB2 Y P R R S S VEDRSRKEVIKALRN KVPVEYVL |  |
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| UniRet90－UP100036C0C4A |  |
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| UniRef90＿S6A512UniRe90＿－QVCII3 $\quad$ Y $\triangle$ ARAGREVEELTAKE $\square$ ARSLQNA |  |
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| UniRef90_TOMWV3 |
| :---: |
| UniRef90_C7P317 |
| UniRef90-F3KKL2 |
| UniRef90-H81583 |
| UniRef90-B8GFL8 |
| UniRef90-Q3SSI7 |
| UniRef90-A8JGM5 |
| UniRef90-W7KZC1 |
| UniRef90-UPI0003CFC938 |
| UniRef90-D7DRD4 |
| UniRef90-D5VS92 |
| UniRef90-UPI00036A2418 |
| UniRef90_UPI0002DE9CD1 |
| UniRef90_C7DGC3 |
| UniRef90-Q1K284 |
| UniRef90-G7VGB8 |
| UniRef90-N6VZ92 |
| UniRef90 B5YIA8 |
| UniRef90-D2RFH5 |
| UniRef90-G3C9B2 |
| UniRef90-F4FYC6 |
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| UniRef90_F6IPD0 |
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| UniRef90-A4A019 |
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| UniRef90-W0DGD2 |
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| UniRef90-C7MNL3 |
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UniRef90_Q8DJB0
UniRef90_D8FBN2
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UniRef90 TomWV3
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UniRef90_D8FBN2

FAPAGTC VEDLSRSQDLAALR
 ARPPEGKSVEDLTQKEI DKALR FSPRGKS VEDMARKEIIKALRN

FVARAGREVEELTGKEDAKALSN
ILPKPYKDLANSPKEHFAQLLQEA YVARAGKEVEETSKKETLKCLR

 RAPDG KEVEELTRKE\ITKALR

Y $\square$ ARAGKEVEQLTAKEDTKALRN
Y ปARAGREVEELTKKE DKCLKSRDPVNSE
RAP EGKEVENLTLKEI IKALRN YRAPAGREVEELTPAEI KSULE y VAragreve eltakelak SLSN FMARGNVGVEH HSLRIVRLPEG[DPDDLIKA




F $\square$ ARAGREVEELTGKE $\square$ AK S $\square \mathrm{S} N$
HRAPEGVEVEELTPQQTTD ULKN FAPEGESVEDLQRGELLAALEKTPYEVYVE

FAPDGQS VEDLQRHEVMSALR
FVTRAGKEVEELTRKEIIKALR
FAPEGES VEDLSRSSLLAALEKAPFE FSPR R RSVEDMSRKE IVKSLRN
$F \vee A Q T F \vee A \vee A$
Y I A R APDGVEDLVQKEVIRALR
lupas_21
lupas_14
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jnet
conf
sol25
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jhmm
jpssm


