## QUERY UniRef90_JOSAV3 UniRef90-H3ZR24 UniRef90_Q12UG7 UniRef90-E4NS42 UniRef90-D8J582 UniRef90-U1NXS9 UniRef90_W0JZY2 UniRef90_R9T9A7 UniRef90-A8AB83 UniRef90-10A186

 UniRef90_UPI00035C8F57 UniRef90-Q4RF15 UniRef90-TON1N3 UniRef90-W7KIS3 UniRef90-A0A023F5P4 UniRef90_G0QF62 UniRef90_UPI00037041CE UniRef90-G9BAU1 UniRef90_R9SN13 UniRef90_UPI0004635369 UniRef90-G6D8S5 UniRef90-ROMCZ6UniRef90 T1A7Z8 UniRef90-J7RIY8 UniRef90-E9GCR1 UniRef90-L2GRG7 UniRef90_A0A024U1M9 UniRef90_J9F1I3 UniRef90-A8MB76 UniRef90-Q65SK8 UniRef90- X115P0 UniRef90_K3W7L7
UniRef90_A2FXT7 UniRef90_J7SL90 UniRef90_J9K6IO UniRef90-A9BKY9
UniRef90_M0C1Q9 UniRef90-B1L6M0 UniRef90-A8MDU0
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UniRef90 E0RUF5 UniRef90-D7G4Q1 UniRef90_S9UHM1
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UniRef90 R4W8Y2 UniRef90-K0BG80 UniRef90_B9LVQ1 UniRef90_UPIO0046FBAE1 UniRef90_L9VRR6 UniRef90_M0JPJ5 UniRef90-LOJJK8 UniRef90 L8D8R8 UniRef90-14EKV4 UniRef90_UPIO0046D3E4C UniRef90_C1BVX8 UniRef90_Q5JDJ7 UniRef90_Q89AF4
UniRef90_Q3IMX1 UniRef90-E4NU13 UniRef90-A1WXV2
 LD DLHVGPATAQKLKDAGFTTVEAMAVASPAELANSAE LDLPGVGPATAEKLDDNGYDTYTSLAVASPAELSNTAD
L E ELP

- V E $S V$ V $S L$ R D I E
$S$ IE D IP $S \| S D L P$
$G V G E A$
GI GQALNKLMDSGYT TLESIAVASP QDLSTAVG


 | GF R T I |
| :--- |
| $A G F A$ |
| $H G M$ |
| $H$ |
| $G$ |

 | $A$ | $G$ | $Y$ | $H$ | $T$ | $V$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $A$ | $E$ |  |  |  |  |
| $A$ | $Y$ | $N$ | $S$ | $V$ | $E$ |
| $A$ | $G$ | $Y$ | $A$ | $D$ | $L$ |
| $S$ | $M$ |  |  |  |  |
|  | $G$ | $L$ | $H$ | $T$ | $V$ |
| $E$ |  |  |  |  |  | G L


 ALE E S GMNASDI NKLKDAGFHTVDAIAMATKRQLI GI K G ALE E_K GIN A GDILK KLE EA GYHTVEAVAFTPKKMLIDNVKG
 L L N L E GM E R HDAA F R L A E K N DK T L E E L A E Q G V D D L A D I I E E L E DLS S V GPATAT K L R K L G F K T V

$\qquad$

 K G I S P S D D K N L
 $S L V I L K G V G R V R A K L L Y E A G Y R T V R D I A E A E P E Q L E R I V G G$ VEFI E GVGRVTA QKLRESGYNTALDVAYAGVKELA DVLG GI ED I S
$\qquad$
VE E L E
E

VK D L P A | $L$ | $E$ | $G$ | $I$ | $A$ | $G$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $L$ | $T$ | $K$ | $L$ | L | L | $\begin{array}{ll}1 & K \\ G \\ M & S \\ N\end{array}$

$G L E A L D E$

 SVRDIP GVGS S IA D KLEAA GYLSAWSIVVARAAELAAERTG $\square E$ T VN

 | $G$ | $G P$ | $K$ | $R$ | $A$ | $E$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $G$ | $R$ | $R$ | $R$ | $S$ |  |
| $S$ | $A$ | $R$ | $D$ | $\square$ | $K$ |
| $V$ | $V$ | $I$ | $A$ |  |  |

GLTAID $L \mathrm{~L} S \mathrm{I}$ LT K L P
 GI S A A DVKKLREN
$S \square D D \square$ I T E L E LS ALD LT E L S

 LTDI S GVVGEGTAENLRE \begin{tabular}{ll|l|ll|lllllll|lll}
$L$ \& $L$ \& $C$ \& $L$ \& $P$ \& $K$ \& $I$ \& $E$ \& $R$ \& $D$ \& $M$ \& $S$ \& $C$ \& $Q$ \& $L$ <br>
$I$ \& $A$ \& $D$ \& $R$ <br>
$I$ \& $V$ \& $S$ \& $L$ \& $K$ \& $G$ \& \& $G$ \& $R$ \& $V$ \& $R$ \& $A$ \& $R$ \& $R$ \& $L$ <br>
\hline

 LVAIP 

$L$ \& $L$ \& $N$ \& $L$ <br>
$L$ \& $I$ \& $K$ \& L <br>
\hline
\end{tabular} I S GV GA S KA D A LRRD DSLE GVGPVT TRKLSDAGVHNVMD







|  |  |
| :---: | :---: |
| QUERY | 1 S EKAAAKMIMGARDLCDL |
| UniRef90＿J0SAV3 | GESSAKKII KAAREIA D |
| UniRef90－H3ZR24 | SEGAADKI I QAAREAANI G |
| UniRef90－F4C0F3 | VGEATAAKI I A GAREAADVG |
| UniRef90－Q12UG7 | I GESTAAKI I NAARQSADI G |
| UniRef90－E4NS42 | $V \mathrm{GESTSSDII}$ NAAREAADI G |
| UniRef90－D8J582 | V GESSAGDI I RAARNAADVG |
| UniRef90－U1NXS9 | I GESSASDI I SAAREAADI G |
| UniRef90－W0JZY2 | $V \mathrm{GDSTAADVVQAAREAADVG}$ |
| UniRef90－R9T9A7 | I GESTATKI I A S AKQMADVG |
| UniRef90－A8AB83 | PLT TAQKII RAARQMLD |
| UniRef90－10A186 | P INTAQRAI K A A R D A |
| UniRef90＿UPI00035C8F57 | L S Y K K Lbel TEKARKLLGF G |
| UniRef90－Q4RF15 | SEAKADKI LTEAAKLVPMG |
| UniRef90－TON1N3 | GEGA I I KI I A A A RKLAADVG |
| UniRef90－W7KIS3 | P LT T A Q K I K E A REALD |
| UniRef90－A0A023F5P4 | S EAKADKI MSEALK V P P G |
| UniRef90－G0QF62 | L G DKKAQGI ITESRKELDIG |
| UniRef90＿UPIO0037041CE | I SEKKAEELI RLAARESI E |
| UniRef90－G9BAU1 | I GEKKALKVI GVARS S I N |
| UniRef90－R9SN13 | I GEGVAEKVI EAARKSEK |
| UniRef90＿UPI0004635369 | L DAERAGKLI MAARNDCWFG |
| UniRef90－G6D8S5 | SEAKADKI L SEASKLVPMG |
| UniRef90－R0MCZ6 | FSDVKVDRLI KEAAKLVPMG |
| UniRef90－T1A7Z8 | 1 GE GA A QKI I QEARKRVQVG |
| UniRef90－J7RIY8 | I SETKADRLL NEAARLVPMG |
| UniRef90－E9GCR1 | $\checkmark$ S EAKADKI I A E A QKMVPMG |
| UniRef90－L2GRG7 | FS DVKVDKII K EAAKLVPMG |
| UniRef90－A0A024U1M9 | 1 T E A K A K M L K A A REMVNVG |
| UniRef90－J9F113 | LSEAKVDKIVEAAQK\｜VNLG |
| UniRef90－A8MB76 | I GDK】AGSII EQAHQLVKDG |
| UniRef90－Q65SK8 | LSAEKAADLIMAARNILCWFG |
| UniRef90－X115P0 | FGEDTAKKIVAAAR |
| UniRef90－K3W7L7 | 1 S EVVKAEKMLKA A R EMVNVG |
| UniRef90＿A2FXT7 | I SEAKADKl MAAAAQLVPMG |
| UniRef90－J7SL90 | L NDEKAGELIMAARNICWFG |
| UniRef90－J9K610 | I SEAKADKI LAEASKMVPLG |
| UniRef90－A9BKY9 | 1 S EAKAEKLLNEAYK\｜VPMG |
| UniRef90－M0C1Q9 | FGEKTATAVHKSATAI A |
| UniRef90－B1L6M0 | $\square G K Q L S R E L V D Q A R S L A Y V G$ |
| UniRef90＿A8MDU0 | SEDRARQI I A A A QRLL |
| UniRef90－E7QZT9 | 1 G N A L A ARIK |
| UniRef90－M4SMR0 | I S EQKAEKI LMEAYKLIP M G |
| UniRef90－T2MEE7 | 1 SEAKADKILSEVIKLLVPMG |
| UniRef90－G4RL64 | NEERAAQI I EAARSMLGL |
| UniRef90－G4TB77 | $\square S E A K A D K I ~ I ~ A E A Q K M V P L G ~$ |
| UniRef90＿I3TD17 | LPPTTVSRI I D S A R KVV |
| UniRef90－E9EVG4 | I SEQKAQKIL GEASKLVPMG |
| UniRef90－D5VQK5 | L GEKAAAKI I EAARELCDLG |
| UniRef90＿J7GZ42 | LDEVVMVTTLREQAKNA |
| UniRef90－L9XIJ4 | FGRKTAQKSHASATALL |
| UniRef90－D5U1N5 | PPTALQKVIENARRALG【 |
| UniRef90－L9W637 | VGNALAARIKA |
| UniRef90－B8D610 | LPVLTVQKI I ENARKM |
| UniRef90－G0UU85 | LSEAKVDKII EAARKLADCG |
| UniRef90－J2ZDI8 | VSPDRVEDWVSQARDLLD |
| UniRef90－U4LGT4 | I SEAKADKLIAEASKLVPMG |
| UniRef90－M0LQM0 | GAAFAERIKQGAEDLVE |
| UniRef90－UPI00029AA8E9 | S VKR\RKF |
| UniRef90－K7J259 | SEGKADKILQEASKLVAMG |
| UniRef90－F6BE28 | I SEKAAAKI I AAAREYCNIG |
| UniRef90－I1BZI6 | SEAKADKI LIEAAK【IGLG |
| UniRef90－F4WY93 | I S EAKADKLQLEASKMVMMG |
| UniRef90－E0RUF5 | I PESTARQI |
| UniRef90－D7G4Q1 | I SEQKAAKLKETVYKLVP\G |
| UniRef90＿S9UHM1 | I S DNKAEKI MSECAKLVPMG |
| UniRef90－W6Q2Y2 | I S EQKATKILVEASKLVPPMG |
| UniRef90－L9WJ71 | I SPSRLENWVEQARE |
| UniRef90－C7NV64 | 1 G N A L A A R |
| UniRef90－M9U4Q8 | I S SEQA GELIMAARNDCWF G |
| UniRef90－LOHKF7 | I GEK L A HEI L K Q ARR |
| UniRef90－V4JDR1 | 1 GYa TAASIL E |
| UniRef90－Q7VLI1 | L S AEKAGELIMNARQ\CWF |
| UniRef90－Q8D2X5 | L SNKKAGELIMAARNICWF |
| UniRef90－R4W8Y2 | 1 G N A L A A R I K A |
| UniRef90－K0BG80 | MEKDTAEKI VNKARQHL |
| UniRef90－B9LVQ1 | IGESSAQSI RQSAHAL |
| UniRef90＿UPI00046FBAE1 | 1 GKSLVNKIKKN |
| UniRef90－L9VRR6 | S P S Rli e d wle Qa Q |
| UniRef90－M0JPJ5 | FGRKTAETVIKAARAFAD |
| UniRef90－LOJJK8 | 1 GP S TARKIVHSARALAD |
| UniRef90＿U5H4C2 | I S EAKAEKMLK L A CDQlPM |
| UniRef90－L8D8R8 | LTDEQAGKLIMAARN\｜CWFG |
| UniRef90－14EKV4 | 1 GPSLAK Q I K M S |
| UniRef90－UPIO0046D3E4C | S EALARRI K E A |
| UniRef90－C1BVX8 | SEAKADKLLAEGQKLIP T G |
| UniRef90－Q5JDJ7 | S T K R L K K FI A |
| UniRef90－Q89AF4 | L NSNTAGMLIMAARNDCWFG |
| UniRef90－Q3IMX1 | VGNALAARIKA |
| UniRef90－E4NU13 | V S ESQFQQWI D E A NERLN |
| UniRef90＿A1WXV2 | MDEDRAGQLIM |
|  |  |



| UniRef90 X6MDC8 | $\|G D G K \nabla A K\| \stackrel{50}{Q E A} A C K \\| \mid A G$ |
| :---: | :---: |
| UniRef90－R4XAF9 | ISEAKADKILLEATKLVPDG |
| UniRef90－Q482U0 | LDETKAGELIMAARN |
| UniRef90 E1YER3 | I AKEKAEKLINSATEA |
| UniRef90－M0PBT6 | TS TSRAGDWI EQATQMVRGG |
| UniRef90－K7AS80 | LS DKKAGELIMAARN\｜VWF |
| UniRef90－M0N5E8 | 1 GT A L A A |
| UniRef90－K71784 | I S DQKAEKIMKEAMKNVQMG |
| UniRef90－A0B6R2 | IS $\mathrm{S}_{\text {K K I I S WQE S A R S I I H K G }}$ |
| UniRef90＿A7NMG2 | RSAEQIVRWIERARDL |
| UniRef90－E8LM65 | MTEEKAGQIIMAARNECWF |
| UniRef90－R4LAY2 | 1 S EAKMEKI KEASGKLCD A G |
| UniRef90－A4S1B6 | LSEQKVEKLKQAANA\｜VPAG |
| UniRef90＿Q8ZTI5 | 1 EYDRAVKL LQQA |
| UniRef90－Q5CS33 | IS EQKCDKI KSACKELVAMG |
| UniRef90－UPI00047213EB | M NRQAA QNVI |
| UniRef90－X1PTR8 | VGESTADKY K K A K L I K |
| UniRef90－Q6Q242 | LSEAK ID K M QLVAFKMVPMG |
| UniRef90＿UPI00037392DF | LDEEKAGALIMAARNIVWF |
| UniRef90－C7P1B2 | T T ESRVRDWLDQ |
| UniRef90－X1AVS9 | IGGNTTAKRYI NTAQNYLE |
| UniRef90－V4JIG5 | L GEAKAAK ${ }^{\text {I K }}$ |
| UniRef90－U1NK25 | I GSATADDL ${ }^{\text {d }}$ A |
| UniRef90－S2WF24 | 1 GPVLAAAI Q A A L R E |
| UniRef90－U1NGW8 | V SVDRLRKWQSAA |
| UniRef90－V4YIM9 | $V \mathrm{GNALAAAR} \mathrm{\\| K}$ |
| UniRef90＿Q2HAG3 | 1 S S QKA A KI $\square$ A E A SK LVPPMG |
| UniRef90－LOAN28 | VGRERARTI HQHARV |
| UniRef90＿C4M4K4 | 1 S D A K A D KL L A E S S K｜VPL |
| UniRef90－B6AFJ5 | LSEAKVEKIVEAAQKL |
| UniRef90－IIYFQ7 | I DAEKAAALI MKAR |
| UniRef90＿J3Q4M9 | 1 S EAKA DKLLS $\square$ CH QLVPPLG |
| UniRef90－F6DCE6 | 1 S P S La QK |
| UniRef90＿UPI0004717DD6 | I DEQTAK W WIE E A G K $\square$ |
| UniRef90－M0MHG5 | I G N A L A A R I K |
| UniRef90－LOR4G2 | I GEAKVERI DTEGSKMVPMG |
| UniRef90＿UPI00036A07A4 | VGKKKAEAI HE |
| UniRef90－A8ABD8 | LGTNKAQEIV |
| UniRef90－K6Q0J2 | M NRAAARTVYRAFHRLL |
| UniRef90－A1ST44 | LNEAKAGELTMAARNICWF |
| UniRef90＿U3A2S5 | LS PKR】ARWVEAASD |
| UniRef90－Q3LW29 | L NDRKAEKIL S L A K K R V PVG |
| UniRef90－H2YAG9 | I SEAKVDKI KEAAAK【INPG |
| UniRef90＿C1F696 | 1 GEKTLEKI STAVR |
| UniRef90＿W9SKA4 | 1 SEAKVDKI I EA |
| UniRef90－D8FCA2 | I SQEKAEALIAEANAYL |
| UniRef90＿UPI0003B5AC26 | GPAKAA |
| UniRef90－M0RJE6 | I SEAEVDKI DEAASK L VPPLG |
| UniRef90－L7TGY5 | LTEGKAEKI HQRAREAV |
| UniRef90－17JBP4 | FSEQKVDKLKQACKELLCHLG |
| UniRef90＿UPI00030644F2 | 1 GPALAERIVAAFRK |
| UniRef90－C7NHI1 | 1 GPGL A R TV Q |
| UniRef90＿D1NSJ5 | $V \mathrm{GKAKAKSI}$ F |
| UniRef90－A0A031M4U7 | 1 DEARAGALTMAA |
| UniRef90－D2RQY2 | I S Q A R A A WI Q A A Q Q A |
| UniRef90－LOHL61 | I GEKKAKQlY |
| UniRef90－F9UG92 | MDRERAARLIMKARE |
| UniRef90－R5DZN5 | 1 D HDKAAALI TKARE |
| UniRef90－L0IA63 | V S A D R VR S WQA |
| UniRef90－K1ZEN5 | I DEEKAAK【IM $\square$ A R K |
| UniRef90－U5N8E1 | I STELAQTI YRA |
| UniRef90＿UPI0003B32AC7 | I GEKTVEKI SVA VR |
| UniRef90－L9WIF4 | L GQATARTAlESAQ |
| UniRef90－E7QTL4 | V SEDRLRNWQAKA |
| UniRef90－S5ZWR6 | I EFERALRLVRTA |
| UniRef90－O59025 | I GAK\VEAILKHLGGREVK】 |
| UniRef90－W0JX63 | V SADSVREWQAK ${ }^{\text {S }}$ |
| UniRef90－Q5UY89 | 1 GEQTAET |
| UniRef90－M0GZJ0 | VGEKTADEL |
| UniRef90－D3HP07 | MTEDKAAAL $\quad$ MKARE |
| UniRef90＿S7U9J7 | VGHKRAARLHET $\square$ R A LVG |
| UniRef90－R6W7V4 | 1 SRPTAKKI |
| UniRef90－A0A059KMK4 | 1 S S D DaEAI Y Q A L R |
| UniRef90－L9W9U7 | V GRTTAEKLHAHA |
| UniRef90－17BSV7 | I GEKTAETIK |
| UniRef90－X2HCK3 | I DEETAKKVVMAARAH |
| UniRef90＿UPI00037DBB54 | I S RALLAEKI HNA |
| UniRef90－UPI000465C6A7 | I S EARARAFVEAARDLL |
| UniRef90＿UPI0004778A41 | I N A E L A ERIY Y A L |
| UniRef90－W0BHZ5 | MTKEKAGAL $\square$ MKARE |
| UniRef90－H5SKN8 | $1 \mathrm{GRVL} \mathrm{V}^{\text {R R I I REA }}$ |
| UniRef90－D1B5F2 | I GERLAKRI |
| UniRef90－D7EBR0 | I SNNLA QKIVD |
| UniRef90－D3Q9G7 | 1 GPALAATITAS |
| UniRef90＿C8VYM8 | I NNKTVEKI LEQARR】LD |
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| UniRef90－A5Z8H6 | I SEKVAKDI YK |
| UniRef90－Q2SML4 | V DEERAAQLIMTARK |
| UniRef90－B3V6E4 | I GPTSARAI L EVLR D |
| UniRef90－F1W0J1 | I SRQLAEDI YRQ |
| UniRef90－Q2LWU5 | VEERTATLWIEEAGR\IDD |
| UniRef90＿Q3AJW5 | VGPALARDI |

## UniRef90 F8AYY9

 UniRef90-GOV4K3UniRet90 M1UW54 UniRef90-F8EXP3 UniRef90-F7GA3
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UniRef90_R4W166 UniRef90-F6BB43 UniRef90-D2AVC4
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UniRet90 UniRef90-F2JZ61 UniRef90-V8GBG6 UniRef90-O1GHZO UniRef90-M7AP40 UniRef90-U5T2B9
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UniRet90-R6WPV7 UniRef90_UPIo0041292DD UniRef90-Q013L3 UniRef90-D5WUK2 UniRefofo-B3P195 UniRef90-V4XH87 UniRef90-E8XY99 UniRef90-O5ARI8
UniRef90_l3CEW1 UniRef90-W8WWIT UniRef90- F3KGII
UniRef90 E6JYC5 UniRef90-V4GWK1 UniRef90-E6SM07
UniRef90
D4ZW42 UniRef90-E0E1C7 UniRef90_G8QPW3 UniRef90-UPI0002E55A75 UniRef90-B9KC51 UniRef90-C4Z4U3 UniRef90-U2CML7 UniRef90-G0QBK3 UniRet90_B4NJK2 UniRef90 UPIOOO2742AFF UniRef90-D5CRZ3 UniRef90-W9DQC1
 1 PGI GPVTAKKIVEKGKDTLE 1 IEMNPERLTEVDG ALEGVQG| TASDLKKLREEGVHSVEAVVYMTMKQLTSICG GI NANDVKKLEEAGFHTVEAVAYAPKKELINIKG
 DEDDPGLGETSAEKLKAAGLDTLEKVATSQPHDLSEKSG GLRAL DGVEQRARTLREAGYPDREALAKADVATLADLDD VESLPDVGPQLAENNLKH FKTVERVFTAKEDELMEVEG
 LDD:PGVGTKKRQALLQH FGS:LGKIKQASKEELVEVAG AVTRLPGVGPRTAGRLKEDGVTSVEEVAALDPEEVGKLKG ALKSVPGVGNVTFRKLLEA FETPERVLKASVNELARVKG


 NLLKI DGMNDILASQLAKKNIFTLEELADQGDDDLSDIKN VESLPYDGSKARRLDES FGSVEAVMNASEKELMEVEG SLEDUGVGAKRRKALLTR FGGLDGVKNASEDELAKVDG AVTEAGVGEAYAKALENAGGSLVRLAAATPEEVAEVPG SLNS:MKGLGTTYQQRLSDAGIENVGDLAESSPEEVADAAD LDUEGLGEKDIDRLVDSGVKDVADIVYMTPFDLAQQPG GLEAVSGUPKTAERLAERGVTTRTELDETPGETLAALPN LEKLDGUGAAKAKALLSHGFGGAGVKKASAEELAAVKG
 DLEGLNADLIAKLADAGI LDETPGVGPKRRKALLSH LDKLSGLKYEDALKLVEHGD LDDVPGVGPARRRNLLAA FGGLLDGVREATVEDLCRVEG
 ALDG|PGGLGP ARRQALLRHFGSLKRLRDATEEEIRAVPG LDGLEGMDTADLAKQLAANGGRTMEDLAEQSVDADVNEVKG



| UniRef90 F8AYY9 | \|I GRHTARA|I $\frac{50}{V}$ DA |
| :---: | :---: |
| UniRef90 G0V4K3 | IGEKKAQRISEA |
| UniRef90-M1UW54 | VSEAKAEKLKSAAAQLVMAG |
| UniRef90-F8EXP3 | L GE $\square$ T A R T I VE |
| UniRef90-F7IGA3 | 1 S EA |
| UniRef90-C7NUH3 | APLGRVEDWFEA |
| UniRef90-N6WBB8 | 1 GL S L A S T l Le A |
| UniRef90-UPI00034701B2 | I GPKLA Q Q |
| UniRef90-Q1MQH2 | I GEAKARMLAERLQS L |
| UniRef90-B3PFS3 | I SHKLAEEI |
| UniRef90-M1XQ59 | V SEDRLREWQA |
| UniRef90-B6UY07 |  |
| UniRef90-C7DIB4 | 1 S |
| UniRef90-R4W166 | L A R S T A T S 1 VNCAR |
| UniRef90_F6BB43 | 1 GEKTAKKI |
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| UniRef90-LOKD53 | I GPQLA Q Q I K |
| UniRef90-R6MJG3 | 1 S EQIA K S I Y N |
| UniRef90_A0A023WZX1 | FGKKSAEKIVAAAERY |
| UniRef90-B9M5T4 | $\square S P N D A A S I V T E Y R R \ A D L$ |
| UniRef90-X1IC44 | I GDT SAKKLI Y GANAL |
| UniRef90-J3D4E5 | 1 SHTLAEEI YRQ |
| UniRef90-B3E394 | V S QELARLI KA |
| UniRef90-G4CFM0 | SRALAEKI Y A |
| UniRef90-X1CYA1 | I GMLLSANKI I E N A L ELL |
| UniRef90-G2LPM8 | L NSEQAGLLIMTARNICWFG |
| UniRef90-D9PYS1 | 1 GKRIA S EI |
| UniRef90-Y0KI57 | V S Q LaEkI Y Q |
| UniRef90-10H1D9 | I GRRTAETVLA |
| UniRef90-C7P121 | LS PNR】S G WI EQA |
| UniRef90_M0GXH1 | APKKRATEWI ERAKEL |
| UniRef90-B9K734 | 1 GQRT】AKII E EAKK |
| UniRef90-M2RT63 | I SEQKADKILAE |
| UniRef90-D2RRL0 | VGRDGARTMHEHAR |
| UniRef90-R5Q2A5 | 1 T P ETAERI |
| UniRef90-W8KSN3 | V DPEQAASLIMAAR |
| UniRef90-B4WIT8 | I GPQLA K Q |
| UniRef90-F5YBK8 | L GDITAK TI |
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| UniRef90_C5LD22 | V SEQKAERLKRAALSLIP M G |
| UniRef90-B8CYK1 | I S NKTARVI Y D Y LRE |
| UniRef90-E8Q6S0 | LTTKEDGDL $\square$ MEARNDCWF |
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| UniRef90_F2JZ61 | S AKKAEEIYQ |
| UniRef90-V8GBG6 | I S QQLA EKI Y E S LR |
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| UniRef90-K9T1S1 | 1 GGQQLA QEI Y N |
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| UniRef90-E6JYC5 | 1 GKAKASAl Y S S |
| UniRef90-V4GWK1 | VGDATARTIAE |
| UniRef90-E6SM07 | M |
| UniRef90-D4ZW42 | I GEKLLA Q Q |
| UniRef90-E0E1C7 | I T ERLAEDILR |
| UniRef90-G8QPW3 | 1 D A D RAKQLITNARSH |
| UniRef90_UPI0002E55A75 | LGPALAATI HE |
| UniRef90-B9KC51 | S A EVARRIL |
| UniRef90-C4Z4U3 | $\square$ TENVAENIY |
| UniRef90-T1HJR2 | FSEAKVDKI K E A C L K $\square$ A S V G |
| UniRef90-U2CML7 | 1 P EHICAEEI |
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| UniRef90_B4NJK2 | L GESKVDYI MSEASKLLVPMG |
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| UniRef90-D5CRZ3 | 1 SPLLLAEKI Y Q |
| UniRef90-W9DQC1 | 1 S KNLARKILQ |
| UniRef90_GOHWG2 | V S A TVVREWQDE |
| UniRef90-R7RMR3 | I GPKKAEK I A E S F K E |



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| UniRef90_UPI00045E9A07 | 1 GAKRAKSI |
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| UniRef90-F8L9T4 | I S SEMAQDI $\square \mathrm{EK} \square \mathrm{Q}$ K $\square$ |
| UniRef90-LOEUC1 | I SKKlA HKI |
| UniRef90-UPI00037049D0 | I S DKLAEKI |
| UniRef90-F8GCN5 | I S RKLAEKI Y K E |
| UniRef90-R6H784 | $1 \mathrm{~T}^{\text {O K K A A E }}$ |
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| UniRef90-UPI000348C63F | 1 GPKLAETV HA |
| UniRef90-K8RP76 | S $\square$ a L A Q Q I Y R Q |
| UniRef90-E3F1A2 | I S DAMAEKI Y N |
| UniRef90-B8H7L9 | 1 GPALDAAAIV |
| UniRef90-C7NPN5 | VGEATAKT |
| UniRef90-K01M99 | 1 GPAVAEKLKDQLNKKKRLG |
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| UniRef90-H8Z4A1 | MDEERAAALIMKARE |
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| UniRef90-UPI000366CDD1 | GASKA QVLY |
| UniRef90_UPI00031DD8CD | GEKLA R T I L S SLl R D |
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| UniRef90-V4Y9D3 | V GESRAATWVSRATE |
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| UniRef90-M8EBN7 | 1 G D K A R E I I A H L R K M |
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| UniRef90-UPI00037F6A83 | I SRKLAQQI Y S |
| UniRef90_Q5F928 | 1 SKALAETI Y |
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| UniRef90-B6YXM0 | I GLK V V E GL F M |
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| UniRef90-R7JN31 | $V G P A K A \quad A R L L V H F G$ |
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| UniRef90-D4L024 | M NEQAARAVYSFLRE |
| UniRef90-A7NNA2 | MTRKAAEELK |
|  |  |




L G EK R A E E A L V L R A KKMLDE
LSSESDV EA LVLRAKKML
LSEVKVEKI KEAAGKUQT $\square \mathrm{G}$
VGEVTAERIRE
1 SEKNAQEIYN
SKGRA 1 QQRAR
TS EALAEQV
I GPRLARQ|YN
I GPKTAQRI
I GETTAKRIKKRE【LE
LDEDKAAQLIMKARE
1 GKETA
VGKSKAQK TYQAFHK
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LSEDKVDKIVEAALK $\square$

L NRKVAENMYHFFRK
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V S D ARARGFI D AARKLAK
1 GKA LAMR A AEKLRE
L GA QKA GQL $\square$ MKARE
I GPQLA QKI
LSRRQAKQiVSSAKMLLN
MTRPAAE
\STELAEETYRA
I GPRTAGAIKDAAR
I AEARLHDY!
I A L S RVEGWI EQASE
I TEDEARALIMKAREH
I GETTATAVLAA

| VGEKMAKEVVQ |
| :--- |
| $F G P K L A T Q V V T A D Q$ |

1 S VK R L KK F V S Q
L GDKTAKKLI WNARNALGM
i GEKlAREI
$V G P S L A A N V Y A A L Q Q$


I SRVLA QKI Y A Q
FGPVLA GAVVDAARK
1 SKKI AEDI YSA
LSEAKVDKI MAAARTAAG
I G V A T A
$T A \backslash R E A \square A \square G$
I SEQKAAKLKQA
I S A QLA QUI


MSEQAAKKVYE
VGVDTVEGWQDQ
I GPAVAAAI
VGEARAKKVVR

1 TSAVAQNI YDYYR

MSKKLAES YEQSRQLAG
I SKKKLA E S I Y Y A S
I GREKAKKI K
I SRTLAQDI YAA
I GDVTADRIRE
VGKVQADEI YKYFR
MSLKAAQALKEALREGAP
IPQKTAQTI ISGAKE $\qquad$
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L SRRQAKQIVSSAK
VTEDEARDLI
VGPALAQQV
I SARIA AT I
LSEIKVDKIKNAANTLCP
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1 GLTTARTVLDALR
I GPALAETII
I GKKMAKS:
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I DEEQATNLIMQAR I GPSRQDKI IKGWAD $V$ S D A LA Q

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UniRef90 U2YK82 UniRef90-A8FG01 UniRef90_Q2Y7W1

1 $\mathrm{NLLQQ} \mathrm{\| KG} \mathrm{\| GRVLSMR\mid LHEAG}$ SLDE:EGADGPRKKALL

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s
 GLQN PGGVGPVTAQKILD
 HFGSAKGVSNAKLKDLEAVEG K FKSVKR1| KEASEADIATL


R H YRSHHGSFASVDDLMEVSG MELPGVKIARAKQLWRAGFTSLASIAAAKSSDLVTVEY VEGLPNVSATLAKRLLAHFGNVEQVFTATEEELKEVEG
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 LDAIPGI GEKRRKQLLKH FGSLKKIKEAEVEDFKAVS
 $\square \mathrm{DA}$

G
 GI TVNTVR LNTIPGVGEKTGKRLLLTHFKSIELIKNQDLEALCQUPG GLQAIPGVGPTRKRALLRHFGTLKAIERASLADLEQVPG LENUSGUGEKRRQALLQY LGGGQGVMKASVTELSSVVPG VNENTAQRLIEAGFDTLKRIRLADPDALADVPG LQRMQGIGPATARLLWEAGSSLQEMVDAGEKGLAALPG MKGVGPKTAERLVEAGEDTFA I LLDNEPERLAAVKG TESLPNVSAKDSQRLLEH FGSVKDVINAEVGELDQVKG LESLPGIGPSTAEKI GSTREKAFTSLEDLGRVKG
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| UniRef90 E8WS47 | \| | THRNLNP| ${ }^{50} \mathrm{~L} E$ QAKEFA |
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| UniRef90-G2Z369 | V GASKAAKI |
| UniRef90-Q6G424 | I STT ${ }^{\text {d }}$ AQK। |
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| UniRef90-F7USV5 | 1 G P S K I |
| UniRef90-F4QJN5 | F DEDTAQELQARARDFLE |
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| UniRef90-B9G9E2 | LSEAKVDKI CEAAEKLL |
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| UniRef90-K9S9Z0 | I GPRLAQQI Y ¢ Y F HPAAD |
| UniRef90-R0GBX0 | I S K KVA Q ${ }^{\text {I K K }}$ |
| UniRef90_G7E200 | I SEAKADKIIAAAQKEVPMG |
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| UniRef90-C7HUD8 | I GESQALEI DK |
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| UniRef90-UPI0003713A3E | I S R Q La QRI |
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| UniRef90-B8DU32 | 1 GAEDADSI FEEAR |
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| UniRef90-R7WFV6 | L S R DKAETIIR |
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| UniRef90_UPI00030EF06E | I GKKT A E K M I S S $\square$ S D $\square$ |
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| UniRef90_UPI000388D3D3 | LS RRQARQIVS S |
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| UniRef90-K1ZFV2 | I GPKRVERI $\quad$ A A WQ D Q K E $\square$ |
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| UniRef90_C9TMN8 | I SEAMARAI HDHFRD |
| UniRef90-R5BV63 | M NERSARQVYEFFHA $\square$ GK $\square$ G |
| UniRef90_U6B9F2 | 1 S K K I A K K Y R |
| UniRef90_A0A059LKF0 | L S E A KVEEKMLD A A K K S CP |
| UniRef90-H0AD04 | LGEKKASSIL R S IL D |
| UniRef90-UPI00021A5693 | L Y VGQA GKL K K S A Q SLL |
| UniRef90_UPI0003801342 | V S RTLA ERVYA |
| UniRef90-A0A022MDA5 | I GRKTAETI |
| UniRef90-F210K0 | I S ELLIAKKI Y N |
| UniRef90_K0C7D0 | I SKSLA QRVYN |
| UniRef90-D6WC99 | L P R R V A K Q L $~$ A A A K ML |
| UniRef90-W9GK86 | I GPALAETV |
| UniRef90-U2YK82 |  |
| UniRef90_A8FG01 | IP K Q TAEELI EALKK |
| UniRef90-Q2Y7W1 | MDTERARQLI MAAR |
| UniRef90_H8I7K5 |  |



|  | 50 |
| :---: | :---: |
| UniRef90_UPI000252AA39 | L S K K V ${ }^{\text {A M Q }}$ U I E G A K |
| UniRef90-Z9JYD4 | 1 G P |
| UniRef90_K0B9U3 | L G E L R A K K $\square \mathrm{K}$ K |
| UniRef90-R5S2K6 | M NEKAAASVYK |
| UniRef90-F8I9W6 | M T A K A A E EL |
| UniRef90-A0A024GPS9 | 1 S EAK L E K L L Q A GRKMAP |
| UniRef90-F8CRH6 | I D P A RIP S MQEAAR |
| UniRef90-N9Y625 | 1 NKKA A ES I $\square$ N Y FNK |
| UniRef90_UPI000410B5DB | I GPKLA E T L R T HLR N |
| UniRef90_Q5PB81 | IS $\quad$ IKL A Q R I Y A |
| UniRef90-Q8GE51 | M NVEI A ERVLNHFR |
| UniRef90-H3NRZ0 | MTEEWAAELI MTARE |
| UniRef90_UPI0003F68EFA | 1 S A Q L A K R I Y Y |
| UniRef90_D8GLK5 | I DRRTAESI IS Y FKK |
| UniRef90-R7HR09 | V GPAKARIVVAALSDAAENG |
| UniRef90_V2RIZ3 | 1 S E E A A V GI I N A A $\square \mathrm{D}$ Y L |
| UniRef90 R6NM70 | M NEKAAEEV |
| UniRef90_D0LVJ3 | M G R K A A E |
| UniRef90_E4KZ58 | M NEASANS ITYQHFR |
| UniRef90-I0GMW5 | 1 GKK T A A K I VA S |
| UniRef90-B5JUM1 | I S R S T A E AVYEA |
| UniRef90 UPI000369CDCA | L S K A T |
| UniRef90-U1PVG3 | I A E T R I T R W D D Q |
| UniRef90_R7IL99 | FDEKT A A DLI IA ARAVV |
| UniRef90-F8KZ53 | 1 l E |
| UniRef90_W8YGE4 | I G S A L A E R I VA A |
| UniRef90_J9W0E3 | $L$ S EA KVEKL K E T C T K $\square$ LP |
| UniRef90-R7XWV5 |  |
| UniRef90_V8ACF7 | $\square$ N S E T A R T $\square$ Y E |
| UniRef90_R6QPC2 | MT RKAAKE |
| UniRef90_UPI00047E6BA1 | $\square \mathrm{GEAK} \square \mathrm{N}$ DI CRADT E Q K |
| UniRef90_UPI00036FC901 | I GLA K A A Q I K A A |
| UniRef90-I3Z5T1 | I G K S TVQKMK |
| UniRef90_UPI0002E4FD47 | I GASRAGLLQDAARAH |
| UniRef90-Q1NJF8 | I GPELAA AVI HD H L R |
| UniRef90_UPI00046D5B89 | L P R R V V S Q I D S AKLLL |
| UniRef90-K9UBH0 | 1 G S HIA T E I Y N |
| UniRef90-T0MJY1 | V N S R T A N E |
| UniRef90-17WEF9 | I K EKSAEKLLA A |
| UniRef90_D8MQK0 | I S QLLAEKI |
| UniRef90-M0J3W8 | 1 D P TVV V A WK G Q A R D A |
| UniRef90-I3TG86 | F G VRLLVES |
| UniRef90-H2J6P6 | G EK T Y E K |
| UniRef90-U2T8W5 | $V P E A V A R E V Y D T L R$ |
| UniRef90_W5W5K6 | V GRRTAEAVHASLAK |
| UniRef90 D6GR06 | I D R R T A K Ni VE |
| UniRef90-M0CBL1 | L TESRAEVLIEEEAQSHVPVG |
| UniRef90-M1PGC0 |  |
| UniRef90_F6A1N6 | S K V VA QMLY Y NTSR |
| UniRef90_Q04U32 | 1 GHTTAGQLL L KLLRESVE |
| UniRef90-G4I4D4 | I G T A T A A AVLEA |
| UniRef90_UPI0004724D15 | 1 G P A R A E M I |
| UniRef90_U1PTS9 | V GEA T A A R I S M N R Q A |
| UniRef90-D1BCE9 | I GPHTARTAVA A A Q Q L A D |
| UniRef90_A6Q4P2 | V GEK T A Q K L E HFSKH |
| UniRef90-F3NTD7 | KAHGQALLYAMALLARD |
| UniRef90-E4PLC4 | $\square \mathrm{S}$ K S L A E T I Y A A |
| UniRef90-UPI00039591FA | QS A D DAKAL $\square$ MKAREH |
| UniRef90_G1WFB1 | V S EDVA R A L Y T L R |
| UniRef90-D5BP18 | I S K T FAQQI |
| UniRef90-M0HJ21 | V S VIE Q A V D WLE Q A R D L A |
| UniRef90_B9M422 | I S A TVA E S L |
| UniRef90_UPI0003B5993F | L S F A DVES WIE Q A |
| UniRef90_E8WIV4 |  |
| UniRef90_UPI0003639B94 | I K EKS A Q KLY Y A $\square \mathrm{Q}$ |
| UniRef90-V2XP54 | M NEGAARAVREFFRE |
| UniRef90-K0IHB0 |  |
| UniRef90-R6GIZ2 | VNQA L A V ${ }^{\text {V }}$ I QK Y F K E |
| UniRef90-B5JGH9 | FGPVRAENV |
| UniRef90-UPI0004780320 | IS R K I A E D I |
| UniRef90-H5UTP8 | I GPALA R S I |
| UniRef90-UPI00047B937F | I D R GL A ERI Y A A |
| UniRef90-R7BYE9 | L DEEAASKL $\square \mathrm{MAAR}$ |
| UniRef90-E1YIT6 | I T VE I A N AI K E |
| UniRef90_G2G237 |  |
| UniRef90_UPI0003C3A9AC | L GPRKAKKL YKT L Q E |
| UniRef90_E0RRM7 | CPEHVALDRVKEALLRLLE |
| UniRef90_UPIO002197500 | $\square \mathrm{P}$ K T T A Q T I K |
| UniRef90-C7LTD0 | F G P |
| UniRef90_UPI0002555D72 | FDEKKAGEVIMAARNATWF |
| UniRef90-G8BMZ2 |  |
| UniRef90-T1KWQ0 | LS A AKVDKI REAVAKASP |
| UniRef90-G8UHT2 | I GESKA G I L I N GLK K |
| UniRef90_UPI00040CDDB2 | V GEALA ERII A |
| UniRef90-W4EF50 | 1 G E K L A G Q I L E A L K D |
| UniRef90_D4J474 | M N A GSARAVYA |
| UniRef90-C4FBF7 | VP A EVARSVFES L R A L |
| UniRef90_D7AKU4 | M NPRSVVSIVA Q A A ELAK |
| UniRef90_J9HP20 | $\square \mathrm{G}$ D K L A S E I V T H L R AVL N |
| UniRef90_A9HF12 | FDEDVA GELVRRA |
| UniRef90-UPI00046F7AC9 UniRef90_T4VMA5 | FDEDVAEELIRRAQEY $\square E$ MNKSSAE |



| UniRef90_D7CPI2 | MNRTVAEKV ${ }^{50}$ |
| :---: | :---: |
| UniRef90_A3PNL0 | FDEDTAAELQARARDHLE |
| UniRef90-B1MC92 | 1 GAAT A V/AVREA |
| UniRef90-R6T9Q1 | I T VKKAEKIS QEFK |
| UniRef90_W8QNG8 |  |
| UniRef90-M0P8R4 | V G P VT A E R |
| UniRef90-E1GHE8 | L SEAKVDKI KEDACKLLSNS G |
| UniRef90_A7RUT3 | L PKKHAQQIVSAAKMLL |
| UniRef90-E3BNI3 | I SASLDAE】I HQALKK |
| UniRef90-I5B4G0 | I T L D M A K NLLQ |
| UniRef90-M0HPV3 | V S P K RVQRWIDRANE |
| UniRef90_UPI000426ABB7 | I GPKRRERITAAWA |
| UniRef90-F8JZ00 | I GRTTAESVAAALA Q A S P |
| UniRef90-A0РYB2 | 1 N QKAAKSI DD |
| UniRef90_UPI000374E82E | MDEAKASTLQNQARNRL |
| UniRef90-G9ZLK5 | $\square$ S E TVA R T I K F S L S K $\square$ |
| UniRef90-R5YFA0 | M NRAAAEKVYA |
| UniRef90_C7DIP3 | GPKKAEK |
| UniRef90-A0A011PQ41 | SGR\KREQWVDQAKAJL |
| UniRef90_G6DBD0 | L S R T A A N HLI S A A RVLL |
| UniRef90_UPI0004723755 | FGKKTEEKLLHEIIEQL |
| UniRef90-D5U0F4 | FGPRVARSI K EWLRR |
| UniRef90_Q2JSE0 | LGA GVA LQLQLQAR |
| UniRef90_UPI000380E96D | 1 G P A T |
| UniRef90-F7WZG6 | L T NKQ $\square$ G Q L $\square$ M E A R QVCWF |
| UniRef90-A0ZYN7 | V SETRADYLQETAETVAGV |
| UniRef90_L7L833 | 1 GKTTARTVHEA |
| UniRef90-M0DF50 | VGPKRADAI RAALRD |
| UniRef90_UPI000380F9AD | NKQVAESIYAE |
| UniRef90_UPI0003729FBE | FGEVLANTVY |
| UniRef90-K8Gl10 | 1 GPRL |
| UniRef90_UPI0003687009 | I D Le TAA I VEQAKK Q |
| UniRef90-A0A031WD07 | 1 GSKKVKQ\|VK |
| UniRef90-D2QMG9 | VGKDRAVKLK ${ }^{\text {L }}$ |
| UniRef90_A5IKW4 | FGKEKGKRFIMAARAFLE |
| UniRef90_U7PB18 | FPKK\AENLLQELNK |
| UniRef90-A0A015NZR0 | 1 GDKLAAQII ESLR Q |
| UniRef90_UPI00036D73A7 | IGK T T L K K I K |
| UniRef90-D5GKW9 | FSEQKTEKVKEAAGKCA |
| UniRef90-T218G6 | GESKMKKL |
| UniRef90-UPI00046631BD | QSEDEAKALILKAREH |
| UniRef90_D3FWG2 | V P K NVAEAI Y |
| UniRef90_G0QIG3 | I GEEMAEKI |
| UniRef90_A9G893 | L G $\square$ K K A R A I K Q G A R D FVE |
| UniRef90-R6NBH7 | IS ERKAREI A EQVEDKADM |
| UniRef90-F3B7T7 | M NEKSAQEVYN |
| UniRef90_UPI000394064D | LYYRKQANQIVASAKMLV |
| UniRef90_C5EJ79 | M NKRAA |
| UniRef90-M0AKY4 | GEKTAEN【LESA |
| UniRef90-R6ZL29 | M Q A A E |
| UniRef90-B1CBT5 | MNEELDAKKVKDHFKN |
| UniRef90-M0MVT9 | VSAENVRSWQAKA |
| UniRef90-H2FSV5 | L DEAQAGELDMAARNDCWFG |
| UniRef90-B7K124 | 1 GKALATEI YR |
| UniRef90_A6LN55 |  |
| UniRef90-F8A5J3 | M G Q R T |
| UniRef90-G0VMG9 | MNRQAAE |
| UniRef90-V5SDM2 | 1 S A EMARKI |
| UniRef90-K2QJG8 | V GAAKAELI YKALQK |
| UniRef90-R5Y5T0 | 1 NLELAKKIKD |
| UniRef90-G4QC16 | I DEKSASEI ILLKARAH |
| UniRef90-G4TB73 |  |
| UniRef90-UPI0003B6A59A | V GPAKAATV |
| UniRef90_UPI000381B903 | I S RQLAQRI Y D |
| UniRef90_UPI0002652C17 | LP DKVAQQIVASA |
| UniRef90-G5GGE4 | MDSKSAQSVYDFFRK |
| UniRef90-Q9JYB8 | 1 GPAVLAKLK C Q A |
| UniRef90-G1MFN9 | 1 S VAQRI |
| UniRef90-K2JUN9 | I SRATAKKI |
| UniRef90_UPI00036AB375 | I S S K I A E |
| UniRef90-UPI0003741C96 | L D E EAA T A L $\square$ MKAREH |
| UniRef90-K2JZL4 |  |
| UniRef90-E2ZC45 | IG P RI A ET WI R E A R K LV |
| UniRef90-X5JXT2 | MGEKLALKLVDA |
| UniRef90-H2J3N9 | $\square \mathrm{GE}$ D I A Q Q |
| UniRef90-G8AFH7 | FDEDVAEELKQRALDNFLD |
| UniRef90_F8JFL3 | FDENTAEQI QSRAREYLE |
| UniRef90-A0A016QP33 | FGPKSAATILEA |
| UniRef90_G2LF11 | LP $\square$ WLA EKIVE |
| UniRef90-F1T6E4 | 1 S A Q VA Q |
| UniRef90_UPI0003B72310 | V S QALA ERTY N |
| UniRef90-17J3L6 | L S LTQAQAI K |
| UniRef90_UPI0003B31C92 | V P K N A K El |
| UniRef90-Q5NZS2 | I E Q ERASAL $\square$ S VA R A H |
| UniRef90-LOJLI6 | I GQKRAEDLTEE |
| UniRef90-J9YG72 | V NEKLARVI |
| UniRef90-G2MIII | V GEVTA DRL |
| UniRef90-R5HJE7 | V G AKMAVEI H |
| UniRef90-R5LA84 | I SPESAKKI GEDFRRDAGL |
| UniRef90-F217P2 | IS EQVA ESI HRLDA |
| UniRef90-R6WMX0 | M NMGAATKVYE |
|  |  |



| UniRef90＿Q2CCH6 | I S ETLA EK｜I ${ }^{50}$ Y A |
| :---: | :---: |
| UniRef90－C7PR97 | I GVRADAl FQ |
| UniRef90＿G8AJP9 | I GPKRAQRI I A GWAD |
| UniRef90－R4VV00 | VGQVTVERIL |
| UniRef90＿Q0AFJ2 | V DLDRASKI I IKARE |
| UniRef90－A4BVT4 | I S Q A L A ERI Y Q |
| UniRef90－IOJZU4 | 1 GRKLAEKI |
| UniRef90－R5JID3 | EAKA KI DKEA |
| UniRef90－U2JRL6 | TGPVTGEAI YE |
| UniRef90－R7ITD0 | I NGELAKNILQQ |
| UniRef90－F1KT98 | L SRRQARTIVNSAQ |
| UniRef90－UPI00047D9D8A | I GER $\square$ A Q SVVD |
| UniRef90－T5J185 | 1 GNKTAKQI |
| UniRef90－A3J2X4 | LS KAKKI |
| UniRef90－UPI000362441C | I GSKla AVI GEQ |
| UniRef90－H3N161 | I TRPVAQKI HQS |
| UniRef90－F4XIT4 | I G Y KLA Q K L L N A $\square$ A K |
| UniRef90－UPI00034750A5 | 1 GAGIA E |
| UniRef90－B0UL91 | V NAATAR |
| UniRef90－Q0W6L1 | I G D K L AVS 1 M S QLG R KVD |
| UniRef90－UPI00044098AC | FGQVKVRRILEA |
| UniRef90－V6DPS8 | VGQK |
| UniRef90－A8EYB9 | I S K S L A E M |
| UniRef90－R1CUU9 | M ${ }^{\text {K R RVAESVYKFFRK }}$ |
| UniRef90－UPI0003B6ED94 | 1 G |
| UniRef90－R5XPD4 | 1 NKTAAENTYN |
| UniRef90－G9PVJ2 | 1 SENKAEAI AES WREQRE $\square$ |
| UniRef90＿A7B1F0 | I SQKKLDRIVDSFGK |
| UniRef90＿Q04RU6 | 1 GENLA EKI L K R I R K |
| UniRef90－W0EP99 | 1 GEAKARUI K E S |
| UniRef90－C0GF78 | I GVKKAATI |
| UniRef90－R7GY97 | I GKVRVDRI K T S WQEQKE】 |
| UniRef90＿UPI000225C033 | 1 PHNTAEEI |
| UniRef90－Q4QPI7 | I S L K L A ETI F E T L K N |
| UniRef90＿D8FBX4 | 1 NRNLALIK1 M |
| UniRef90－S0EX65 | IGPATAES |
| UniRef90＿UP100036CCD00 |  |
| UniRef90＿UPI000360A35D | $\square G P K V A A S L I E$ |
| UniRef90＿R9M4I7 |  |
| UniRef90－UPI00034CED76 | TGGERDA ES VY D Y F R N |
| UniRef90－K1QFB5 | LGG S TAVT I K |
| UniRef90－UPI00037304B6 | MS R E LA EKI Y |
| UniRef90－R5DBB3 | M NKKSAEDVYK |
| UniRef90＿Q1AZ75 | LGEKSAQNLDRA |
| UniRef90－A7BXI2 | 1 ERPLA QKI |
| UniRef90－UPI0003B43A60 | VGKAKA QVL $\square$ N |
| UniRef90－Q1YFF9 | FDDETASEI QERAREF |
| UniRef90－R6XQV4 | LGEKSADN【IRS $\square$ R G SVEV |
| UniRef90－L7LI49 | L G P T RAA |
| UniRef90＿UPI00046427CD | I SERVAKLI |
| UniRef90－F9D3A8 | IGP S K A Q |
| UniRef90－A4FBL9 | FGQRTAETV |
| UniRef90－W9G9B7 | 1 GP S L A S A I V |
| UniRef90－K1LM31 | $V \mathrm{PRKTAERVQETLDREQL}$ |
| UniRef90＿V6DJ09 | I GPKK】EKI VSA WQEQKED |
| UniRef90－D2Q0Y7 | 1 GPKTADKITEAVRAVVG |
| UniRef90－L9ZZ71 | I P LMLLDD WADAASSMCE |
| UniRef90＿UPI000473B1A4 | V G |
| UniRef90－E4TDA3 | VG\KTAESLVNYF Q E E E D |
| UniRef90＿C6Y469 | 1 GQRIAAESI I E Y F GKA |
| UniRef90－UPI00037BB391 | 1 SRAMAQH1 |
| UniRef90－R6T6R7 | VNDDTARELKE |
| UniRef90－F8NAU7 | IGPKRDKKI HDS WMKQLDV |
| UniRef90＿UPI000363437B | FDEEIAEELQERAKTAL |
| UniRef90－Q83N19 | F GVKTAEKIKEC |
| UniRef90－UPI00035ED26B | FDEETAQELQARAREFLD |
| UniRef90－UPI00035C54ED | 1 S LTM M REI Y A |
| UniRef90－R71511 | I NRKAAESI |
| UniRef90＿UPI00037FCB12 | I S S Glla ERI Y N |
| UniRef90－D0CXY5 | I GSRRAQALILAANQTVAGG |
| UniRef90－F9ZRU8 | IEPERAKALILKAR |
| UniRef90－IOUXF1 | FGTRTAEAVHTA |
| UniRef90－W8JQN2 | 1 S Le LiA Y R I Le QVS K Y |
| UniRef90－UPI000373BEC9 | VGADKARKVKE |
| UniRef90－C6LEJ6 | I GS $\square_{\text {S }}$ SEAI |
| UniRef90－D0GM71 | VPE KVAVSI K E |
| UniRef90－W0J1A7 | FGEKSQQKIVEG】RN |
| UniRef90－R1AUH5 | 1 GDKVANSII E |
| UniRef90－W4QU81 | IP EKVAEAIMDALLKN |
| UniRef90－U1NEV1 |  |
| UniRef90－S2D1F5 | VG K I I A A Q MKKL |
| UniRef90－D2R7W7 | LTEEQVEEIVNQAETLLA |
| UniRef90－D6ZCQ1 | F GPVLAESVVTA |
| UniRef90 L1KIH4 |  |
| UniRef90－F6EW03 | VS K AVA Q Q |
| UniRef90－U1NAA1 | VGTVTAGRIRE |
| UniRef90－X1HFV1 | VGKKLADTIV |
| UniRef90－V4XX46 | WGETSAQNLI DA |
| UniRef90－W5TEM7 | $\square \mathrm{GPKVAASLIE}$ |
| UniRef90－UPI000366A101 | FGPNLA Q |
| UniRef90－B0U172 | $\square \mathrm{SNKLAQET}$ |
| UniRef90＿R7NVB0 | I GEKI A Q Sil |


| UniRef90_D5EMT4 |
| :---: |
| UniRef90-R5UT14 |
| UniRef90-R6NGW4 |
| UniRef90-B7RM60 |
| UniRef90-UPI00047E753D |
| UniRef90-M8D905 |
| UniRef90-Q55ZY8 |
| UniRef90-M4B624 |
| UniRef90_R5BEL2 |
| UniRef90-UPI000287D57D |
| UniRef90-C4V312 |
| UniRef90-UPI0003B559CC |
| UniRef90-K2EVT5 |
| UniRef90-A0A044V905 |
| UniRef90-M5JAH0 |
| UniRef90-Q0FM95 |
| UniRef90-M5J6F9 |
| UniRef90-UPI0003163110 |
| UniRef90- UPI00046908B3 |
| UniRef90- S9QSI7 |
| UniRef90 R7NF43 |
| UniRef90-D9S0Z0 |
| UniRef90-UPI0003B6AF22 |
| UniRef90-17LQJ1 |
| UniRef90-D6U4N4 |
| UniRef90-Q6AF49 |
| UniRef90-Q18DN4 |
| UniRef90-B5EMC9 |
| UniRef90-R9C8W5 |
| UniRef90 B5IGF5 |
| UniRef90-U7VCM7 |
| UniRef90-1016V8 |
| UniRef90-R5WRJ2 |
| UniRef90-U1NFM4 |
| UniRef90-G4QGW6 |
| UniRef90-W0SE76 |
| UniRef90-G0LBX3 |
| UniRef90-14MCM0 |
| UniRef90-UPI0003B34067 |
| UniRef90-UPI000380C0EB |
| UniRef90-B4VMX9 |
| UniRef90-F6HUX6 |
| UniRef90_U3GZ32 |
| UniRef90-Q5WEK8 |
| UniRef90-R9GUY1 |
| UniRef90-F4LWA6 |
| UniRef90_Q39VL7 |
| UniRef90 B9NRM8 |
| UniRef90_L9VEA1 |
| UniRef90_A1A200 |
| UniRef90-S3BRH9 |
| UniRef90 F4RHC5 |
| UniRef90-D4GY98 |
| UniRef90-A5CYL4 |
| UniRef90-W0JVM9 |
| UniRef90 D5EIA3 |
| UniRef90 U2MBI4 |
| UniRef90-X1M396 |
| UniRef90 U1PF56 |
| UniRef90-C7PVL1 |
| UniRef90-I0R127 |
| UniRef90-Q7UEW1 |



[^0]

| UniRef90_D5EMT4 | \| $\mid$ GPKTAKG\|L ${ }^{50} \mathrm{~V} \mathrm{E}$ |
| :---: | :---: |
| UniRef90-R5UT14 | 1 T EEEAVRI |
| UniRef90-R6NGW4 | M NEKAARQV |
| UniRef90-B7RM60 | V S R A La ERI Y A |
| UniRef90_UPI00047E753D | $V$ NSATAEKI |
| UniRef90-M8D905 | I SEARAKQI Y E S VMEH |
| UniRef90-Q55ZY8 | I DVLQAEDAILQQTRQ |
| UniRef90-M4B624 | LGQASGEKLFANAR |
| UniRef90-R5BEL2 | $V$ P P L A A EILKA |
| UniRef90-UPI000287D57D | VPKNLINTIID YFSK |
| UniRef90-C4V312 | M ${ }^{\text {R T S A E }}$ |
| UniRef90-UPI0003B559CC |  |
| UniRef90-K2EVT5 | $V \mathrm{GEKIA} \mathrm{CSII} \mathrm{N}$ |
| UniRef90-A0A044V905 | L NRRQANAI I RSAKVLL |
| UniRef90-M5JAH0 | 1 SKKVAQKI SLQARD |
| UniRef90-Q0FM95 | TRLIARAQSLVAAA |
| UniRef90-M5J6F9 | 1 S QKVA QVI KA S |
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| UniRef90-UPI00046908B3 | VGEKT\EAI LT RAQQELDF |
| UniRef90_S9QSI7 | V DEETAEELQARARDHIE |
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| UniRef90_D9S0Z0 | LGQKRLEMIVRSFAE |
| UniRef90-UPI0003B6AF22 | S R A Q AVb L Y T A R |
| UniRef90-17LQJ1 | $\square \mathrm{GET} \square \mathrm{A}$ QSLVQ |
| UniRef90-D6U4N4 | I GASRAQKI ASAAQKA $\square \mathrm{K}$ |
| UniRef90_Q6AF49 | $\checkmark \mathrm{GLL}$ R L A A A V F |
| UniRef90-Q18DN4 | V S S Q T Y RWIT Q A |
| UniRef90-B5EMC9 | V DEERAKALI $\mathrm{L}^{\text {E A AR }}$ |
| UniRef90-R9C8W5 | 1 PANVAEQLLAKLQE |
| UniRef90-B5IGF5 | MPLKLANELID |
| UniRef90_U7VCM7 | $\square \mathrm{P}$ K HLA L K I K E |
| UniRef90-1016V8 |  |
| UniRef90-R5WRJ2 | M N A A A K Q V |
| UniRef90-U1NFM4 |  |
| UniRef90-G4QGW6 | 1 S EELA DII |
| UniRef90-W0SE76 | ID A ERATALITVARAH |
| UniRef90-G0LBX3 |  |
| UniRef90-14MCM0 | VGPEDAQDWFKQAKD |
| UniRef90_UPI0003B34067 | L E E DEAVQVI NKA\DYL |
| UniRef90-UPI000380C0EB | IHRRLAQAI YDQF HE |
| UniRef90-B4VMX9 | MGEKSAQKLINQ |
| UniRef90-F6HUX6 |  |
| UniRef90-U3GZ32 | VGEIIA A S F K Q |
| UniRef90-Q5WEK8 | VPTKLAETD |
| UniRef90-R9GUY1 |  |
| UniRef90-F4LWA6 | M NKKAAQAVYE |
| UniRef90-Q39VL7 | \TNPRA\GSILLSQAAELVE |
| UniRef90-B9NRM8 | $1 \quad \mathrm{KVKIVEWVEQAKEL}$ A |
| UniRef90-L9VEA1 | I GESQAEQLIEETAREQAPVG |
| UniRef90-A1A200 | IGSEDAET WF T A ARE |
| UniRef90-S3BRH9 |  |
| UniRef90-F4RHC5 | I S E AKA DKL |
| UniRef90-D4GY98 |  |
| UniRef90-A5CYL4 | M K K A ARAVY |
| UniRef90-W0JVM9 | LS AGVAESVYEQAR |
| UniRef90-D5EIA3 | I GSIMMAQSIHA |
| UniRef90-U2MB14 | INRTTAEE |
| UniRef90-X1M396 | M T ESLAKRVKES |
| UniRef90-U1PF56 | 1 GAAK K A Q 1 K S H A R |
| UniRef90-C7PVL1 | 1 GTKGAER |
| UniRef90-I0R127 | VGPTLAES 1 |
| UniRef90_Q7UEW1 |  |

[^1]
[^0]:    lupas 21
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    jpssm

[^1]:    lupas 21
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