QUERY
UniRef90_Q5ZKH0
UniRef90_G3P229
UniRef90_K3ZBI0
UniRef90_S4R9F1
UniRef90_UPI0003D78A41
UniRef90_I6NDY3
UniRef90_UPI0002C3207C UniRef90_A7SQJ6 UniRef90_E9BYA1 UniRef90_Q6C1B5 UniRef90_V3ZED6 UniRef90_G4TW76 UniRef90_M7WQA0 UniRef90-M0Y7F9 UniRef90_A0A024G2R4 UniRef90_UPI00038C15E3 UniRef90_MOSOH9 UniRef90_A9RU41 UniRef90_UPIO004561672 UniRef90_Q6CTL5 UniRef90_UPI000328B02D UniRef90_W5JLV7 UniRef90-A0A024J6P8 UniRef90_T2MBD4 UniRef90_UPI00046BFE8F UniRef90_Q6BVH4 UniRef90_B7Q313 UniRef90_C4R6R2 UniRef90-TORRE0 UniRef90_-Q0DK33 UniRef90_UPI0001C98B21 UniRef90-K4CNW1 UniRef90_G8BRZ9 UniRef90_E7A2N7 UniRef90-B9HR23 UniRef90-W1QE38 UniRef90_M1VAQ5
UniRef90_J7S5N5 UniRef90_G4MV00 UniRef90_P0C0X3 UniRef90-S8EFJ5
UniRef90 C1BVP4 UniRef90_T1KC04 UniRef90_U7Q453 UniRef90-B3S719 UniRef90_G0SDQ1 UniRef90-G7DZN5 UniRef90_C3KIL7 UniRef90_L8HDL6 UniRef90_E4WRP0
UniRef90_UPIO000D87B3F UniRef90_C4YC80 UniRef90_V4TJW9 UniRef90_UPI0002C2FFCA UniRef90-A5DRF0
UniRef90- W4GA36 UniRef90-W4GA36 UniRef90_M7NLZ1
UniRef90 IOZ2U2 UniRef90_H6QQV2 UniRef90_G2Q7D8 UniRef90_W6U520 UniRef90_C1GGG4 UniRef90 F9FRA5 UniRef90-M2VWH3 UniRef90_G1P5U1 UniRef90_D8QJY9 UniRef90_R4G845 UniRef90_Q5BS73 UniRef90_I1FAE6 UniRef90_C1Ref90_R9A973 UniRef90_UPI0002658DF8 UniRef90_UPI000333E262 UniRef90_UPI000273F7B5 UniRef90_B3H572 UniRef90_A6RGZ3 UniRef90_S9W0N5
UniRef90_UPI0000E4A894 UniRef90_F0XSM5 UniRef90_E9HCW2 UniRef90_L8WQ29
UniRef90 F1LCI9 UniRef90_B2B4Q0 UniRef90_F4RHZ9
UniRef90_R1EPX2
10
0 P $\quad 20$

30

 $V N V L K G V$ IVACDPPMKQFLLFLDETNKKFVIMDLDETHDF $\vee N$ A
 <







<<<<<

V D A S A GVLV $V$ V $V$ N A I K G L $\operatorname{F}$ I S $V$ V L L K GVLI E CDPAMK QFFL YL DESSAK F
 R ARKGAL I


 PKAVHGVLIT

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

 $V$ K A V K G V L L E C D S T V K Q I V L N L N K R G N F V I | $V$ | $R$ | $A$ | $I$ | $R$ | $G$ | $V$ | $L$ | $I$ | $E$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $V$ | $K$ | $A$ | $L$ | $K$ | $G$ | $S$ | $L$ | $L$ | $T$ | VHATKGVLV ${ }^{T}$ V NVE N GKL V $\operatorname{CV}$ C P TASKGVLVR




P PRATKGVLI V K A HK G V L V T C D P A A K Q LI L K L N D Q P D H F I





## P

## V V


$V$ NV H K GI L V K C D P A MK Q F L L H L A E N GKN F V HT DL D D Y H L F



V L I E








| QUER | VNP S K VE F VK | K HELNRLLSKNIYN |
| :---: | :---: | :---: |
| UniRef90_Q5ZKH0 | $\checkmark$ VAELVNFLQ | QERVGELMDQNSF |
| UniRef90-G3P229 | AEVVQTLQ | QERVGELMDQN |
| UniRef90-K3ZBI0 | $\checkmark$ QPHVAEMI R | RSKI GEFRDQNS |
| UniRef90-S4R9F1 | I A S EVVP I L Q | QERVGELMDQN |
| UniRef90-UPI0003D78A41 | V Q P N MAEMI R | RSAIAEFRDQN |
| UniRef90-I6NDY3 | VDPEKVAYVK | KEKL NWFLS K N $\square$ Y N |
| UniRef90-UPI0002C3207C | VQPHAAEMI K | KSAI SEFRDQN |
| UniRef90-A7SQJ6 | VSAG ${ }^{\text {S }}$ VPLQ | QEKVWELMD |
| UniRef90-E9BYA1 | V D P P SLPMLQ | Q TKLDEMLDKNNFT |
| UniRef90-Q6C1B5 | I HP S MVEVVK | KQKLNKMLAENTYN |
| UniRef90-V3ZED6 | I S S D I I E I L Q | QTRIDDLMDK |
| UniRef90_G4TW76 | 1 K A D GEEN | L E S ELEKNTYS |
| UniRef90-G7K0H6 | \|V Q P HVEQMIR | R SQI AKFRED |
| UniRef90-M7WQA0 | 1 S P D AVERVK | K DELEEALEANHWN |
| UniRef90-M0Y7F9 | 1 Q P N M G Y I R | RSKMTEFRDQN |
| UniRef90-A0A024G2R4 | 1 DP K V I T F I K | K K KVDEWNEKNTYQ |
| UniRef90-UPI00038C15E3 | $\checkmark \square$ E E V V AL Q | QERVGEDMDQDAFS |
| UniRef90-M0S0H9 | VQPHVAEMI R | RSKI SEFRDQN |
| UniRef90-A9RU41 | V Q P DVGK MLQ | QSKLQEFRDQN |
| UniRef90-UPIO004561672 | V SPDKVE WMR | T ELESELEKNTY T |
| UniRef90_Q6CTL5 | VDP S K V EFIK | KYELNRLLSENDYN |
| UniRef90_UPI000328B02D |  | QEQVGESMDQNAFS |
| UniRef90-W5JLV7 | SVEIVEVLQ | QARVDDLMDR |
| UniRef90-A0A024J6P8 | VDENKVEYIK | K S L NKL La K |
| UniRef90-T2MBD4 | VAANII K TLE | S KLWELMDKL |
| UniRef90-UPI00046BFE8F | S A DILETLQ | QAKI D DLMDQI |
| UniRef90_Q6BVH4 | 1 D S NKVQAVK | K E L N RLLS K |
| UniRef90-B7Q313 | \| T A D I D TLQ | QNKIDDMD |
| UniRef90-C4R6R2 | V D Q RIPFVK | K A ELARILLAQNSYN |
| UniRef90-M7SZU2 | I KENHLGELK | K A R L D R L K E |
| UniRef90-TORRE0 | 1 D P S VMEFI K | K K KIDE WNDANTYQ |
| UniRef90-Q0DK33 | VQPHVAEMI R |  |
| UniRef90-UPI0001C98B21 | V I S ELVNULQ | QE QVGEL |
| UniRef90-K4CNW1 | VRS D MAGMI R | RSAISDFRDA |
| UniRef90-Q5EHY9 | V La EMVNCLQ | QEKVGELMDQN |
| UniRef90-G8BRZ9 | V DPRKVEYI K | K Q L N RLLS K N $\square$ Y N |
| UniRef90-E7A2N7 | 1 SPDRIDWL | RAELDVELEKNTYT |
| UniRef90-B9HR23 | \|VQPHVSEM| R | RSATADFREQN |
| UniRef90-W1QE38 | V DPSKIVYIK | KQELNK L L K Na Y N |
| UniRef90-M1VAQ5 | VKKEDALSLI Q | QQSVEALYDEV |
| UniRef90-J7S5N5 | V DPAKVEYIK | K SEL NRLLS K N Y N |
| UniRef90-G4MV00 | I K ESMVDMLK | K RLL D QK |
| UniRef90-P0C0X3 | I Q H DKVNFVK | KSEL NRLLS K N $\square \mathrm{Y}$ N |
| UniRef90-S8EFJ5 | VRSDVGTMI R | R S T I A S FRDQN |
| UniRef90-C1BVP4 | I S PEI L P KLQ | Q R I D D |
| UniRef90-T1KC04 | V SPEII ETLK | K NKI D DL |
| UniRef90-U7Q453 | I NENMMETLK | KRRL GERL |
| UniRef90-B3S719 | VTAE】KDTLM | MKKI DAMMEQ |
| UniRef90-S2JH62 | I EA S WVEQL K | KYELDK\LDENSYT |
| UniRef90-G0SDQ1 | VKENMVQULK | KQKLEDR |
| UniRef90-G7DZN5 | VATERVEDIK | K A MLD V ${ }^{\text {a }}$ |
| UniRef90-C3KIL7 | \| L T EVVVQTLQ | QERVGELDMQNSFT |
| UniRef90_L8HDL6 | V DAAKATLI Q | QEKMNEMYEEN |
| UniRef90-E4WRP0 | \|VTADCDT WL K | K GRDADL |
| UniRef90_UPI0000D87B3F | $V K E S Q L Q N L K$ | KMRLSRE |
| UniRef90-C4YC80 | 1 K Q D MVQFVK | K DEL NRLLS K N $\square$ Y D |
| UniRef90-V4TJW9 | VQPNMAEMI R | R S A |
| UniRef90-UPI0002C2FFCA | VPPQAAEMIR | RRAISEFRDQN |
| UniRef90-A5DRF0 | I N S S DI Q Y V K | K NEL NRLLLS K N $\square$ Y N |
| UniRef90-W4GA36 | \| D P D V M Y I N | NEMI DKWNDKNTYQ |
| UniRef90-M7NLZ1 | VHSQQLDRIR | R Le L D R V Le E N S F N |
| UniRef90-I0Z2U2 | VQPTVVEWLE | EKRLKEFNEENTYQ |
| UniRef90-H6QQV2 | VTQECVNALK | K K Q |
| UniRef90-G2Q7D8 | VKETML QVLK | K Q K |
| UniRef90-W6U520 | 1 DPVVLPRLQ | QAKVDDLMEKLS |
| UniRef90-C1GGG4 | I K E SQLP Y K K | K A R L |
| UniRef90-K1VH13 | VRTEAVEEIK | - A ${ }^{\text {L }}$ Q |
| UniRef90-F9FRA5 | VKETMVSTLK | K HKLEEV |
| UniRef90-M2VWH3 | 1 Q W WALKLVQ | Q K L E ELYEENYFQ |
| UniRef90-G1P5U1 | V $\square$ A ELVNVLQ | QERVGELMDQNAFS |
| UniRef90-E9ESZ4 | V K E M MVPLLK | KQKLEDVRS |
| UniRef90-D8QJY9 | I K A DEEGRVR | R R ELEAELEKNTY T |
| UniRef90-R4G845 | \\| S A EVIDTLT |  |
| UniRef90_Q5BS73 | 1 DADILCKLQ | QEKVDGLMES |
| UniRef90-11FAE6 | I SEGVANHLQ | Q GQLD DLMLR NS Y S |
| UniRef90-C1E0T4 | VQPHRLEYVK | K A EVKA WQQKNQFT |
| UniRef90_R9A973 | V S P SVQTI K | KFEVEKELERNTFQ |
| UniRef90-UPI0002658DF8 | 1 ASEII D T | $\square$ N KVDDLMER |
| UniRef90-UPI000333E262 | $\checkmark \vee$ V L V SVL | WKRVGELM |
| UniRef90_UPI000273F7B5 | $V$ TAEMVNVLQ | QEXMGGLMDQNDFS |
| UniRef90-B3H572 | VK P Y A EEMI R | R D A V I F R D E |
| UniRef90-A6RGZ3 | I K E S Q ${ }^{\text {P }}$ HLK | K ARLSN |
| UniRef90-S9W0N5 | VNEHRLEQIK | KAELERRLEENTYQ |
| UniRef90_UPI0000E4A894 | \|I EPEILDVLR | REKI NDLMDQNAFS |
| UniRef90-FOXSM5 | VKENMMVSLK | K K K D D R |
| UniRef90-E9HCW2 | \\| A SKHLEFLQ | QSEI DCFMDS VS |
| UniRef90_L8WQ29 | VRADDVKRIR | R ${ }^{\text {Q }}$ L E Q |
| UniRef90-F1LCI9 | VDKEIVPILE | Q ${ }^{\text {Q L D QLMES }}$ LS |
| UniRef90_B2B4Q0 | V K E Q MVK T | Q A R D E |
| UniRef90-F4RHZ9 | VTQDCIGPL | R |
|  |  |  |



[^0]


## DDPD LLGKLQEHVDQLMESLS F IQPN KID MLLKLKIEN CLLNS T

VKNNRHEGLKRMLKEALKDTV
I KADEEYRVRRELEAE CNNTVYQFLQDKVEKRLN

[^1]


[^0]:    lupas 21
    lupas_14
    lupas_28
    jnet
    conf
    sol5
    jhmm
    jpssm

[^1]:    lupas 21
    lupas_14
    lupas_28
    jnet
    conf
    sol25
    sol5
    sol0
    jhmm
    jpssm

