UniRef90_F2D02c UniRef90-F2DJ59 UniRef90-F2DJ59 UniRet90_M8BMT4 UniRef90_M8BMT4
UniRef90_M8BMT4 UniRef90-M7ZZQ6 UniRef90 M MZZQQ UniRef90-B6TEW3 UniRef90_B6TEW3 UniRef90_11 HBL6 UniRef90-11 HBL6 UniRef 90 -M7ZYS1 UniRef90_MZYS 1 UniRet90-Q9FTR9 UniRef90_Q9FTR9 UniRef90-I1HBL8 UniRef90-11HBL8
UniRef90-G7L4K5 UniRef90-G7L4K5
UniRefon -G7L4K5 UniRef90-MoWov2 UniRef90-K3YAA9 UniRef90-K3YAC0 UniRef90-11HBL7 UniRef90_1 1HBL7 UniRef90-B6UE14 UniRef90 11 H 1 H 9 UniRef90-J3KW15 UniRefolo - 3 KW 15 UniRet90-W5D7C6 UniRef90-G7L4L7
UniRef90-I1NJU6 UniRef90-J3KUP9 UniRef90 M M ZPPA9 UniRef90-M7ZPA9
UniRef90 J3KUQ UniRef90_J3KUQ0 UniRef90-A2ZNR3 UniRef90-F2DGFO
UniRef90 F2DGF0 UniRef90-A4PIB8 UniRef90_-Q5ZCB1 UniRef90-O5ZCB1 UniRef90-Q9AVs0 UniRef90-UPIOOO32A9727 UniRef90-B6TSM7 UniRef90 Q41066 UniRef90_K7LG60 UniRef90-A2ZNR6 UniRef90-11L6K7 UniRef90 ${ }^{-}$K3XLQ3
UniRef90
K3XLQ3 UniRef90-F2DGX9 UniRef90-K3YWN1 UniRef90-ASHE12 2 UniRef90-A5HEI2 UniRet90_MORX79 UniRef90-Q8W4Y8 UniRef90-Q6QM10 UniRef90-Q6QM10
UniRef90 B7E9D7 UniRef90_M0RX78 UniRef90 R7WA76 UniRef90-RTWA76 UniRef90-A0A8V3 UniRef90 MOXQ46 UniRef90-MOZ4Q22 UniRef90-P07679 UniRef90-G7L4L3 UniRef9-11N333 UniRef90-M7Z3W5 UniRef90-G7L4L4 UniRef90_P85172 UniRef90-H6WNA3
UniRef9O-G7L3M8 UniRef90-K4AJ19 UniRef90-P09863 UniRef90-BIVK41 UniRef90-I113H1 UniRef90_UPI0003EA827F UniRef90_P01060 UniRet90 MOTRV2

PWECCDKAICTRSNPPTCRCVDEVKKCAPTCKTCLPSRSR P WK C C D F G V C Y R A LP R A CRECLDEVVEQCAPTCKKSCQPAPS D
 PWGCCDDRPLCTRSVPPTCRCLDNVDRCASTCKRCVVSDGD P WK C C D EA I CTM S FP P IC FCRRDRVVKKCAKTCNKCDEDES D
 P WD C C D N T i PWDCCDNTHCTRSLPPICDCLDDEVDECASCMACVPSVSN P WE C C D L A V CVVK T Y P L T C S C F D R V P WE CCD ATVVCTKSFPPTCRCDDVVDRCAAACDRCEPAED D P WE C C DATVVCTK SFP P T CR CLLDVV DRCAAAACDRCEPA E DD

 P WDCCD KLLK QS R I WPP P KYKC LDDEVD HCAAACEDCK RAD
P WDCCDKKLK QS RIWPPPKYKCLDDEVDHCAAAACEEDCK RAD

 A C C N T C L C S V T ELLT QCRCADVVGKTCHSACKNCECGWS S PWACCNGTVCKESFPP DCRCLDEVVKECAAACKLCEPSGDN

P WD C C D V A V C T R A Y I P Y C WCA A D K V E A C P G N C K E C E LL V E S D

P WKCCDRAMCTRSI P PFCKCCLDLLDDRCPGCCRAEREHEA D
P WDCCD FAVVCTRGLHP LLXVVRRRGGSRAPATKACKEVES D
PWSCCDRAFCTKTNPPTCRCADEVASCAAACQDCQPVESE
P WK CCD LT I CA RSFP PTCRCADVVK QCAD GCKSCMGV
PWECCDNVERSRIQP PRFRCNDFVDRCAAACQQCDPVPS P
PWECCDNVERSRI QPPRFRCNDFVDRCAAACQQCAPVVPS
PWKCCDVTVCTRSIPPTCSCQDVVDNCAPTCEDCN NYVH
ACCNS CPCTKSI PP QCHCADI GEKCHSACKRCLCTR S F
P WPCCD F A IICTK S I PP DCHC S DEVVESCAAAC GQCEMVD S W
P WDCCDDA A V CTARA YDP TCA CA DEVVESCAAAACKDCEVVVSSE
P WK C C D RARCTRSIPPICTCVDEAFECASTCKACVPSTRN
P WK C C DRARCTRRSIP PI CTCVVDEAFECASTCKACVMPSTRN
P WD CCCDNVVE Q S R I FPP P L Y R C N D E V Q Q C A A A C K E C V EA P G D

P WD C C D N T T C T K S I P P I C C S C G D K V
P WK CCDEEPFCTRS FPPI CTCMMDQVFKCPKTCKKSCGP SAA D
P WK CCDDEPFCTMRSFPP ICTCMDDQVFKCPKTCKK CGPSAA D
ACCDLDLCTKSIPPQCRCADIGETCHSACKACLCTBSF
P WECCDDNI EMSK I Y P P R WRCNDEVVK QCAAA CENCL QA G GE
P WE CCDNLI EMSKI YP PRWRCNDEVVKQCAAACENCLLQA GGE
PWSCCNSTVCTKSFSPTCRCLDEVDECAPACKRCEPS GIN

P WD C C D SVAC T R D Y IP N CMCLDKVES CS S N CERCELYHS D


P WD C C D N $\square$ E $\square S$ R L YP P L Y R CN D EVVK QCAA A C K ECCV EAP G G
A C C D A C A CTAK S IPP P I $\quad$ C H C H D F G E T C H S A C N L C I C T A S Y


PWKCCDMQVCTLSVVPSCWCHDRLERCSLACKECSKVRSD
P WD C C D N I E M S EI F P P LLY R C N D EVVK Q C S A A C K E C V E AP G D
P WD C C DNI EMSEIFFPPLYRCNDEVVKQCSAACKECVIEAPGBD
P WD C C D K A $\quad$ C S R S Y $\square P \square C$ S CA D EVVES CAAA CK D C Q P VES E
P WA C CD MCLCTMRSFPP QCRCTDEIGGGCHPNCKNCHCTRSF
ACCDTCLCTRS QPPTCRCVDVRESCHSACDKCVCAYSN
P WKCCDEPFCSGEDPPTCHCADE
PWKCCDEPFCSGEDPPTCHCADE

PWACCDSCSCTKSIPPQCRCTEQIGGGDPNCKTCDCTRSY
P WK CCDEPFCS GEDPPTCHCADEVEQCAPTCKTCLPALLH


PWVCCNSTVGTKSFPPTCRCLDEVEECGPACKRCE
CCNSSTVVCTK S FPP P T C R C CLD E VVEECCAPACKKHCESSSGIS
PWKCCDLQTCTKSIPAFCRCRDLLEQCSDACKECGKVRSD P WE C C D I A M C T R S I P P I C R C V D K V D R C S D A C K D C E E TE D N C C D N C H C T T T I P P L C R C A D D V
A C C D L C LCTM S Y P P Q C N C V D E S E T C H S C C K N C I C N K K F
P WDCCD HPVCTKRS WCGCKDVVEQCFPACKSCKPAESA
ACCDKCYCTK S RPP QCHCADLLNKTCNSACK LCCACDPS P
 C C D Q C A C T K S I P P Q C R C T D R L N S C H S A C S S CVVCT F S

P WK C C D Q A V C T R S I P P I C R C M D QVVF E C P S T C K A C GP S V G D

A Y C D R K S DP TCCHCA D EVVQS CAA A C R Q C E MV E S W

C C D Q C A C T K S N P P Q C R C S D R L N S C H S A C K S C I C A L S Y
WPCCDRCGCTKS TP PQCQCQDMVRSCHPSCRHCVPLSVS

|  | T |
| :---: | :---: |
| UniRef90_F2D029 | T |
| UniRef90-F2DJ59 | TEHSCDDQHQGDPGPRCS |
| UniRef90-F2DJ59 | TEHSCDDQHQGDP |
| UniRef90-M8BMT4 | ASRHVCGDSYFGWP |
| UniRef90-M8BM | CGDSYFGWPGPRCT |
| UniRef90-M8BMT4 | ASRHVCGDSYFGWPGPRCT |
| UniRet90-M7ZZQ6 |  |
| UniRef90-M7ZZQ6 |  |
| UniRet90-B6TEW3 | DSRHVCVDR |
| UniRef90-B6TEW3 | DSRHVCVDR |
| UniRef90 11 HBL6 | RRVCKDQY |
| UniRef90 M 7 ZYS 1 | PPRRVCLDRYTGD |
| UniRef90-M7ZYS1 | PPRRVCLDRYTGDP |
| UniRet90-M7ZYS1 | PPRRVCLDRYTGDP |
| UniRef90-Q9FTR9 | GGGYVCRDWYWGNP |
| UniRef90-Q9FTR9 | GGGYVCRDWYWGNP |
| UniRef90-11HBL8 | PEGYVCHDMYHG |
| UniRef90-11HBL8 | GYVCHDMYHGSPGPACS |
| UniRef90-G7L4K5 | C C C C P D T |
| UniRef90-G7L4K | LCTCYDTY ${ }^{\text {CHFCYKPC }}$ |
| Mow |  |
| UniRe |  |
| UniRef90-11HBL7 | EsfVCHDVYRGAPGPNCS |
| 11HBL7 | FVCHDVYR |
| UniRef90-B6UE | D VF |
| UniRefof0-J3KVZ2 | YVCQDQFTGQPGPSCT |
| 11H1H9 |  |
| 俍et90_J3kw15 | DWY GSPGPRCS |
| iRef90_3KW15 | DWYVGSPGPRCS |
| iRef90_W5D | RRVCLDRYTGDPGPKCT |
| UniRef90-G7L4L7 | QCRCTDT TDFCYEPCS |
|  | YV |
| UniRef90-M7ZPA9 | LQVCEDQYVGDPGPIC |
| UniRef90-M7ZPA9 | QVCEDQYVGDPGPic |
| UniRet90_J3KUQ0 |  |
| UniRef90_J3KUQ0 | DWY |
| iRef90_A2ZNR3 | PRFVCKDQFTGQPGPKCT |
| F2DG | PSRRUCQDQYMGDPGPMC |
|  |  |
|  |  |
| UniRef90_Q5ZCB1 | DVVFVGDDWYTTNPGPVCT |
| UniRet90-MOVVI | PNRHVCND |
| UniRef90-Q9Al | K ${ }^{\text {c }}$ |
| UniRef90_UPIOOO32A9727 | CRCMDNTGFCYDSCS |
| UniRet90_B6TSM7 | QCRDTF |
| UniRef90-Q41066 | PPQCQCFDT |
| UniRer90-L7N9W6 |  |
| UniRef90_K7LG60 |  |
| UniRef90-A2ZNR6 | DFNFVCSDWFTVDPGPKC |
| UniRef90-11L6K7 | CRCLDQT |
| UniRef90-K3XLQ3 UniRef90 K3XLQ3 | RTCCVD |
| UniRef90- F2DGX9 | D |
|  |  |
|  |  |
| UniRef90-A5HE12 | RFVCRDWYTV |
| UniRef90-11NJV2 | PPRYVCHDRFK |
|  | CYCRD |
| UniRef90-Q8W4Y8 | QCQCYD |
| UniRef90 O6QM10 | D |
| Q6QM10 |  |
| iRe990_B7E9D7 | DQFTGQPGPKC |
| UniRef90_M0RX78 | D |
| UniRef90 R7 |  |
| UniRet90 R7 |  |
| UniRef90 Q8 | GKCRCLDI ADVF CYK |
| UniRef90-A0 | PPQCRCTDVKLDNCAP |
| UniRef90_MoxQ46 UniRef90 MoZ402 |  |
| UniRef90-M0Z4Q22 |  |
| UniRef90-P22737 UniRef90-P07679 |  |
| UniRef90-P07679 | D |
| UniRef90-G7L4L3 UniRef90-IIN3P3 | CRCMD |
| UniRef90-G7L4L0 | CYCSD |
| UniRef90-M7Z3W5 | GYMCRDAYHGSPGPKCM |
| UniRef90-G7L4L4 | LC R CVD |
| UniRef90_P85172 | Qcrcso |
| UniRef90-H6WNA3 | Q CVCVD |
| UniRef90-G7L3M8 | D TDFCYEPC |
| UniRef90-K4AJ19 |  |
| UniRef90-P99863 | PAHCSCTDT NDFC |
| UniRef90-1113H1 |  |
| UniRef90 UPI0003EA827F | SPLIFMCHDRFTGLTGRRCT |
|  | OCOL |
| UniRef90 P01055 UniRef90-MOTRV2 | C F C |



[^0]

| UniRef90_B1ACD1 | $\mathrm{PG}\|\mathrm{~L}\| \mathrm{CQC} \square \mathrm{D} \mathrm{~V}^{50} \text { T N F CYE } \mathrm{C} \text { C }$ |
| :---: | :---: |
| UniRef90-J3KUP8 | PFLYLCNDWHTSDPGPSCT |
| UniRef90-J3KUP8 | PFLLYLCNDWHTSDPGPSCT |
| UniRef90-P09864 | S SRRVCEDXY |
| UniRef90_F5BCP6 |  |
| UniRef90-11L6K8 | P Q CRCVD T T DFCYEPC |
| UniRef90-UPI00032A83E4 |  |
| UniRef90-I3SZ94 | P P Q CRCHDV |
| UniRef90-P83284 | PAKCRCFDL |
| UniRef90-P86701 | P P Q CR |
| UniRef90-W5AMA9 | A GFQCADS $\square$ T NFCQRRCT |
| UniRef90-M0ZEL6 | PNRHVCNDQYHGDPGPTCA |
| UniRef90_UPI00032A6105 | $\mathrm{P} \square \mathrm{L} C \mathrm{~T} C \square \mathrm{D}$ |
| UniRef90-P81484 | PA Q C $\square$ CTD T |
| UniRef90_Q7M1P9 | P A K C R CVD T |
| UniRef90-Q2VMU0 | P PQCRCTDKTQGRCP |
| UniRef90_W5FTS6 | P AVY Q CMDRVP NFCQRRC |
| UniRef90_G7L3N1 | PLKCTCLD |
| UniRef90-P01062 | PGKCRCLD T |
| UniRef90-P01063 | PGQCRCLD T |
| UniRef90-I1GLG9 | P PVVY H CMDR!ANFCQRRCS |
| UniRef90-P82469 |  |
| UniRef90-K4AGV5 | APLFQCTDFITNFCKRRCT |
| UniRef90-K3XNA5 | PPVY R CADLLTNFCQRRCT |
| UniRef90_W5ANS9 | $\square$ A GFRCADRIANFCKRRCT |
| lupas_21 |  |
| lupas_14 |  |
| lupas_28 |  |
| jnet |  |
| conf | 8815888861577777889 |
| sol25 | B B B B B B B B B |
| sol5 | B B B B |
| sol0 |  |
| jhmm | $\longrightarrow$ |
| jpssm |  |


[^0]:    lupas_21
    lupas_14
    lupas_28
    jnet
    conf sol25 sols sol0 jhmm
    jpssm

