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| UniRef90-UPI00030DA61D | CNSYGAKYEV NYRQGV |
| UniRef90-W61 | A La Y D CNDDL DLHQGGYYPV |
| UniRef90-A3JPF7 | A ASYGVTAELDLEVG |
| UniRef90_UPI0003053BB4 | CQALLNCSVQFDFHRRYP |
| UniRef90-D6XX07 | AETYGASATFEY $\square$ PGYP |
| UniRef90_UPI00034B4836 | CDAAGASYSFDYRK |
| UniRef90-A8U395 | CATYGATSETD |
| UniRef90-A6T3C9 | A QSNGASATVSYRYAYP |
| UniRef90-M7NI58 | A G GLG G SVTLTYHYG |
| UniRef90-G9PZY6 | AEALGCEAELQY |
| UniRef90-Q12IG4 |  |
| UniRef90-W0SHK2 | EATYRVSIDLRYERGYPPTV |
| UniRef90-UPI0003B69A46 | AESAGATVEVGFEAYVPVTYP |
| UniRef90-UPI000465FFA5 | A A AHGLDVEVDYAEQYPLTV |
| UniRef90-A0A037Z459 | A ATFRAEAELQYS |
| UniRef90_UPIO0046406F9 | A ASHGAVAHI DYARGYPPTV |
| UniRef90-E8W487 | A A A HGVTADI DYVEQYPPTV |
| UniRef90-H3ZQX7 | TLANNASYGLK |
| UniRef90-R4RWC3 | A ASFGVDV |
| UniRef90-UPI000469C543 | AATFGAKATVDY |
| UniRef90-UPI00037EB945 | CQAHGATYEFNYDV LYP P |
| UniRef90-U2SK18 | AKAFGATATVEYDYYANSLY |
| UniRef90-Q1Q4B0 | TSYNNASYEFEYDGGYPVLY |
| UniRef90-R6H792 | ALSYGATAKFEWTYG |
| UniRef90-D0J8C1 | A AVVHRATAEVDYKWRYP P |
| UniRef90-UPI00031C54B0 | TAAHGADYEFKYECGYDP |
| UniRef90-K0NZ78 | ALSS Y GVKVTPEFNQGGYWPV |
| UniRef90-C8NH40 | A E $\square$ N R CEFE |
| UniRef90-H1QT05 | A A AHGVQAEVDYEDDYPPTV |
| UniRef90-UPI00037DBCF9 | TTAFGTSGGVRWDEGPPPV |
| UniRef90-UPIO0037A9BE4 | AMGDGASATLDYQRDYPATV |
| UniRef90-R9CD16 | E TGYDCECTI DF GS GYY QVY |
| UniRef90-M1Z065 | EVAFECKGEIDFGSS |
| UniRef90-UPI00035FCF34 |  |
| UniRef90-UPI00037266B7 | CGGLLGASVDYKYTRGYPAVV |
| UniRef90-X2GY55 | ASMHGARVDIK WE |
| UniRef90-S0EUZ2 | CSADRAKYRFTYD |
| UniRef90_UPI0003B695EC | A NAFDCQARVSYQRRYP |
| UniRef90-B6A2A4 | AESFGAAAEVNYRLGFPALV |
| UniRef90-13ZS79 | AMAHGASYELSIEE LVP |
| UniRef90-M7P1P3 | AKALLGCTAEADVEYGY |
| UniRef90-G9PZY5 | A AGYGCTAELD YK |
| UniRef90-A0A011NWG3 | ASAFGAQ\SVRFDHRYPATV |
| UniRef90-M5WZF8 | AVVHRCNAYVDMKDEEFPPLP |
| UniRef90-V8A3W3 | A A ANDCAAMVEHLNGSPVLV |
| UniRef90-B6A0H5 | AESFRATAEFEWIVGYP |
| UniRef90_UPI00035D64BB | CAMYGADVHLNYLMGYPTLV |
| UniRef90-UPI00028887B0 | CAFMDADYDYQFIRGYPAVV |
| UniRef90-UPI00046827D2 | ELS F NDK】DLEFNQGGYYPVV |
| UniRef90-H3ZPD5 |  |
| UniRef90_UPI00045EA2FF | A A AYGATATVSFKEGY |
| UniRef90-R9NDU7 | AEVFRAEAIIEFSDNYT |
| UniRef90-D4W8R5 | AKMFRGEAEL |
| UniRef90-14BWH7 | A A GFRAEAKVNYT |


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| :---: | :---: |
|  |  |
| UniRef90-H157B6 UniRef90-Q7CSF: | A |
| UniRef90-UPI00 | ( A ADDFY |
| UniRef90 UPI0003AB23E7 | ASADELYFTIKGKGVDPILTAAHVVVALQQVISRRNNPQN |
| UniR | AGCYRFLVTIHGKGKDPIITQAAIISQLQTIVSRSNNPFD |
| UniR | ASADDUH\|DVQGRGVDPIVAASQVVLGLQTVVSRQLNSEE |
| UniRef90-F7SMT6 | ASSDDFEVTMPHLLTTDPIVAASLFTTALQQUVSRNLDPQD |
| UniRef90-UPIO00403AC80 | AGADFFDITIQGRSKDAVIDATTLTQALQTIVSRNVDPDK |
| UniRef90-L8D737 | ASADSFEITLTGRGVDPIVAAAQVVMATQTI ASRQIDVTK |
| UniRef90-F5ZKB3 | SNDALIAAAYFLTQVQTIVSRNVDPIE |
| UniRet90 |  |
| UniReef90-A0 | AGTCAFEDTVRGQGVDTLVVTSQLVLALQTVVARNVHPCE |
| UniRet90-K2A |  |
| $\begin{aligned} & \text { UniRef90-W7CC } \\ & \text { Unife9o UPO } \end{aligned}$ | ASADVVE\|l| |
| UniRef90-UPI00047A7679 |  |
| UniRef90-I4BY00 | A SSDDWEAEIKGKGKDPTIAAANIIMSVQTIISRELDPLE |
| UniR | ASVDQAVIRVPHNTVDPVLAAAHIVTALQSVVARNVDPRD |
| UniRef90-C7L | ARPDVFSITLPHQCIDPILAGSHLVAALQGIVSRRVAPHE ASSNRWDIVIKGLGVDPIVПASEMVQALQTVISRGRNPLD |
| UniRet90 X4Z2G7 | ASSNRWDVIKGLGVDP |
| UniRe | AAVDDFFLTVPHLCTDAVVTGAQLVQQWQTI VSRSVSPLQ |
| UniRet90-U1X0 | AFIRVNGKTADPITAGASIVMALQTI KSRNVPALD |
| UniRet90-W4Q | D |
| UniR | D |
| UniRef90-UPIO0037EF9B0 | D |
| UniRef90_G4R | AGTDQFHAAMPHLAVDPVIVSAHISSGLQTLVSRSVDPIR |
| UniRef90-W6 |  |
| UniRef90-R8VTG4 | AGKCHFTI TLPHKCTDVIVTGAAIVNAVQTIVSRNIDP LD |
| UniRet90-W7ZWW | AAVDKFRIHIQGKGDDSIVVGSQLVNELQTIVSRRVDPMA |
|  |  |
|  |  |
| UniRet90-GGYA | D DFEPAMP HLGDDPLLAAASFVTA QRLVSRSVDPLS |
|  |  |
| UniRef90 U6BAA1 | AAADKFELTLPHETIDDAVLLGATIVKELQSIVSRQLNPLE |
| UniRef90-UPI000474 | ANADQFTirvk ikgkdavila $m i v M S L Q T i V S R R L N A F D$ |
|  |  |
|  | VVIGSQLVVNLQQLVSRAVNPLD |
| UniRef90 G8 | A SADELYVTVKGKGVDTVLVASHLIVVSLQQIISSRNNNPLS |
| UniRef90-UPI00046A | ASSDWFTI QVNGKSVDPIVTASQIVLGLQTiVSRNVNTEN |
|  | ASFDRFAVTVKGKGIDPITHA A |
| UniRef90-X1XM61 | ANADKFVVRVPEQGVDAILVSSQII QALQSLTSRSFNTLD |
|  |  |
| Ref90-M7P74 |  |
| Ref90-G8B0K | EVTVHGKGSDPMTAAGHLLTTLQTI PGRSLHPLD |
|  | AGADRFELTOG |
|  | A ${ }^{\text {ASADEFTVGVRGRGADPVVTLI }}$ |
|  |  |
| UniRef90-D6V5A2 | ASTDHVDIEIIPHKAIDPVLAGSQLIVAL |
|  |  |
| UniRef90-UPIO002E9 | AGLDEFDITVRGRGTDPTV |
|  |  |
|  |  |
|  |  |
|  | ASSDRFE:TVKGRGVDP: VAAADIVTSVQTIVSRRVNVTK |
| 15C6R3 | AGATFFDI TIPHHARDPIVIATALVQNLQSIVSRNVQPTO |
| UniRe990-U2LQC1 | ASADLGKVKFKGRGVDAAVVASAFVVMVQAIVSRETSPLE |
| UniRef90-UP10004769 | ASFDIFEITMPHLGADPIAAAGALITNIQSII SRRISPLQ |
| UniF | AAADRVTIEDAGKGVDPVLVAAHIITAVQSIVSRNVKAMD |
|  | VITVRG |
| UniRef90-A0A01 | AAADTFR TMPHMGRD |
| UniRef90-UPIOO | AAADRFELTPHHTMDSL |
| UniRef90-UPIO0047C9964 |  |
| UniRef90-D9s | AGSDWFKVTIKGTGVDPL NVMVHVYLGL |
| UniRef90 B1CAY4 | FTVFIPHNGM |
| UP100047E58B3 | RUTVKGNGTDP1 V |
| UP100047E58B3 | $\stackrel{\dot{\mathrm{V}}}{\mathrm{~L}}$ |
|  | ASADAFEI IVKGKGKDSILIASQLVDNLQQI |
| iRef90-W814 | ASVDQCNITVGKGVDPVLATASLITALQSVVSRNVDPQE |
| C4L |  |
| foo-x2G | A |
| UniRef90_W3AC42 | AAADSFEVKVGRGKDAVV |
|  | EVP ${ }^{\text {a }}$ |
| 1919 | HAAYPHEAVDAVVAGAMFVNQVQTIVSRNVDPVH |
| UniRet90-H3KFV1 | ASGDRFT KVTGKCADATVIGAATVQNLQTIVSREISPI E |
|  |  |
|  |  |
| $\begin{aligned} & \text { A3X } \end{aligned}$ |  |
|  | Q C V |
| UniRef90-WoBSL9 | D |
|  |  |



| UniRef90_E6X1F5 | $\text { A A GFGAEAEVVD YEYRYPP } 100$ |
| :---: | :---: |
| UniRef90-H1S7B6 | AKSFEVDADIDYVEGYP |
| UniRef90-Q7CSF2 | AESFGATADVS |
| UniRef90-UPI0003F84FF7 | GA $\square$ Y GAETQL NYIIGYPPVV |
| UniRef90-UPI0003AB23E7 |  |
| UniRef90-C2CYN7 | A D A E Q A DI DWSV |
| UniRef90-UPI00038028D6 | AESSGAKAEVRFGPVSYP |
| UniRef90-F7SMT6 | SKTTGCDVTLDYVP |
| UniRef90-UPI000403AC80 | A ATYQCEITADIRDTFSVLV |
| UniRef90-L8D737 | AKAQGAHAHVKI NHGY |
| UniRef90_F5ZKB3 | A ASFNLEVQIELKQGGYLPV |
| UniRef90-Q13J80 | ARAHGAlAALSYHYG |
| UniRef90-A0A011PG89 | A SAFGA Q $\mathrm{S}^{\text {S }}$ VRFD HRYPPTV |
| UniRef90-K2AES3 | A LAA $\square$ GAKAEVVYTRGYP |
| UniRef90-W7CU05 | A ATYGATAEV |
| UniRef90-UPI0002EC89D1 | A A Y GAKAEFRW YPY $\quad$ P |
| UniRef90-UPI00047A7679 | A A CGAT |
| UniRef90-14BY00 | GS ALLR CEVE TNY HVYPVTV |
| UniRef90-X6FP57 | AESFGATAEVH |
| UniRef90-C7LPF2 | A ASMNVRAELDYQRGYPVVV |
| UniRef90-X4Z2G7 | P QVYG GS GEL DFVRAYPPLV |
| UniRef90-A6TMI2 | CEGHRAEYELEVR |
| UniRef90-H3SPP7 | CAMHGAEYELEYRVGYPALV |
| UniRef90_U1XC42 | AESFGLTAEVEYLR |
| UniRef90-W4QQZ3 | EVGGF D C S $\square$ S I D Y G A N Y C QVY |
| UniRef90-UPI0003FCDA8F | AESAGATAEVEl |
| UniRef90_UPI00037EF9B0 | A A A HDCTAEVNIDEG |
| UniRef90-G4RAA9 | ARAFGASATVKWMRGYPVTV |
| UniRef90-W6W319 | AKLIFEAEAEI EWRAGYPVTV |
| UniRef90-UPI000329C62F | VK S Y GA T S QVEVY D S Y P |
| UniRef90-R8VTG4 | A A P Y CTAEVEFHPGVPATV |
| UniRef90-W7ZWW1 | EQSTHVT T DVD Y L N GYPTLV |
| UniRef90-V6J051 | E $\square$ A YQCKGQI D Y G A N Y Q VF |
| UniRef90-GOTRC0 | A SAHGAQCEVSWLESTYATV |
| UniRef90-G6YAY6 | A AMHGASAALTYKRGYPPVV |
| UniRef90_C6X527 | AEAFSCKVEI REGVP |
| UniRef90-A0A031WEQ0 | ARGYQATAKLD Y |
| UniRef90-U6BAA1 | CEAVGATYHFTYEKGY |
| UniRef90-UPI0004744F96 | A ALYGAEATVSYQYGYP |
| UniRef90-W0LBR9 | A A AFGA QVSID ${ }^{\text {V V HAYPVLV }}$ |
| UniRef90-I8AIW0 | CKGVGASCKVHYQRGYPAVV |
| UniRef90_G8TLI2 | VHSMGAEIDLHIDVGYPTVVY |
| UniRef90-L7ZM19 | AQSFGATAIVNHINGAPVLV |
| UniRef90-UPI00046A5B1A | AESAGATSEVT |
| UniRef90-G9PYP3 | A A AFRGSVDFLMDWGAPP |
| UniRef90-X1XM61 | AAANGATATFSWHQG PPV |
| UniRef90-E8KD74 | A A AFDMDVEDELKQGGYLPV |
| UniRef90_W0RFH7 | AESQGATADVT Q |
| UniRef90-M7P7U8 | E E E F GVECELNYVPD Y P P LY |
| UniRef90-G8B0K2 | A A AFGCTASVRYERRYPATV |
| UniRef90-A0A024QFG7 | CTSNDATYSFDY $\mathrm{C}^{\text {K K G }}$ |
| UniRef90-G0A891 | S La Y GAQAEVEYFQYYPATV |
| UniRef90_UPI00037B8396 | AQAYGCTAEVR $\square$ T R G |
| UniRef90-P80092 | CGDYGATCEVKFMEDVYP |
| UniRef90-D6V5A2 |  |
| UniRef90-G7V8K2 | S S SMGGDCIVDYKWGYPP |
| UniRef90-V1XB56 | S NLF GLK S El E Y F |
| UniRef90_UPI0002E99EDE | A GGF GAD $\mathrm{D}^{\text {d }}$ FTYRR |
| UniRef90-Q8H3C8 | A G VNR CAAAVDF LEEEDRPYP |
| UniRef90-I3VYH6 | AEAMGGKAEFNRVEGYP |
| UniRef90-D4GN02 | A AGFGARAELEWI |
| UniRef90-K2K919 | GEAHQAEVETTIFEG |
| UniRef90-15C6R3 | CAGFAASYEVEIVPDLRPVF |
| UniRef90-UPI00035DC302 | AESAGATAEVDITPYAPVTY |
| UniRef90-U2LQC1 | A A ! Y GA A QVEYT |
| UniRef90-UPI0004769BA8 | PLLY GVK GEI D Y QVCYP |
| UniRef90-Q12FI7 | A QGFGATATVTYERDYP |
| UniRef90-I3TVY4 | A A AWGATATVQVDRG |
| UniRef90-A0A011UA83 | AAAFGSQAEAAYSRE |
| UniRef90-UPI00040756DA | CAGAGADYDLT Y 1 Q G |
| UniRef90-W7SUS3 | A A A Y GCSATF QLERGYP $\square$ TV |
| UniRef90-UPI00047C9964 | AKAAG |
| UniRef90-D9SV35 | AKAYRAEAlVE MSNYTP |
| UniRef90-B1CAY4 | SEAYDCK T T Y Wh P F G T Y |
| UniRef90-M7N5I8 | AESAGATAEVVFVPMTPITY |
| UniRef90-UPI00047E58B3 |  |
| UniRef90_A4CKZ5 | A K A YQGEATLTI |
| UniRef90-UPI00037B96D6 | THLSNSDFEYTYDKGYPV |
| UniRef90-W814W1 | AESFGATAEVDYRRG |
| UniRef90-C4LIA1 | CEASGCPAEPD |
| UniRef90-X2GJV0 | CLA F GASYEYRYTRGYPPVY |
| UniRef90-W3AC42 | S I A T D S L Y E Y NFMRGYPAVV |
| UniRef90-Q7NHJ5 | CAAFGADYRLHYGNG |
| UniRef90-K9VNH6 | CATYGAKYELTYKRG |
| UniRef90-UPI00021919A8 | A $\square$ A T GVT A DLQLIDQGGYMPV |
| UniRef90_H3KFV1 | ARAMRGDAELIYEE LVP |
| UniRef90-W8X254 | AASHGCEDRFEHLQSSPPTV |
| UniRef90-N1UR19 | A EGHGLEATVDY |
| UniRef90-A3XIN5 | AKAYGGSATI EFQSNTA |
| UniRef90-M4BGC4 | CAAYGATARVHFLDGYAPVINP |
| UniRef90-W0BSL9 | AEAHLAQTEVVI |
| UniRef90_U2RB65 | TEAFEQKYEIL W |




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| UniRef90_B9L8Q5 | SKSMGAE |
| UniRef90-B1KN63 | A Q S M A S A T K $\square$ DQGYPVTV |
| UniRef90-UPI0004233213 | A A A HGCTAEVAI EAGYPPTV |
| UniRef90_UPI000426F9E8 | AAAHGATVTTEI PAGTGNPV |
| UniRef90-M3D021 | A $\square$ A M G A T A DVSIEA |
| UniRef90-A3SH36 | A QGFGAEARVRYERNYPVMV |
| UniRef90_D9QQW4 | T QALLQADYELEYNCQLPP TV |
| UniRef90-X6EJZ7 | A GGFGA HV |
| UniRef90-D4MAB8 | A R S L R G S C VR YVKG |
| UniRef90_E6X2L5 | CAAMDAKYHFRYEFG P |
| UniRef90-V719E9 | AGSMGATA NFIYGKR |
| UniRef90-Q1V685 | AKAHGMQAEFKLGP |
| UniRef90_X6L099 | ARSFGQSAVLDYVEGYP |
| UniRef90_UPI0004681764 | ASFHGLKVNFDYQP |
| UniRef90-A1K5W7 | A A AFGVEVEFEYRRGYPPTV |
| UniRef90_Q03ZV8 | A ATFGLAVDIS WI |
| UniRef90-UPI00034911AF | CNAYGARYEVNY |
| UniRef90-I3U9Q9 | ATSANASAKVKVVELYY A V V N P |
| UniRef90-R6ZJT1 | AEAFGGTATVDFLRGVPNTY |
| UniRef90-UPI00031139F8 | A QAHGVEALI D Y RQLTPPVV |
| UniRef90-U7PFI5 | ASAFNAEDELEY |
| UniRef90-S8EDD8 | SEVYGCSATVDF FGGSDAVYP P |
| UniRef90_UPI0003B658A0 | EQGFACQATI DWGA |
| UniRef90-M4U7L9 | A $\square$ AF DVE\SL NYQQ |
| UniRef90-S0S853 | GQAFGAKVTI DFTNG |
| UniRef90_G2LJT1 | A A G GASCDIRYE RLVPP |
| UniRef90-E9BMN8 | CRSYGATCNLS WLP G Y |
| UniRef90-R7CJ31 | ARSYSAKADFEWQS G |
| UniRef90-UPI0004650E63 | A A T F G G $\square$ NLDYFRNYPVMV |
| UniRef90-UPI0003B4515D | A A AHGASATVE |
| UniRef90_E9RYQ8 | SAMFGGSCECE I WGAPPVV |
| UniRef90_S4YFB9 | A ASLLGAQAELRWQP |
| UniRef90-UPI0001A442AA | AESAGAKGVIN |
| UniRef90_B1PDJ0 | A A A G L EVDVDYQQEYP |
| UniRef90-UPI000410C804 | A ATYGCTAKI EYQRRYPPLV |
| UniRef90-14YR68 | AESANAKAEVEVIELYDPLV |
| UniRef90-A0A011RC | A A A Y A T $\square \mathrm{DLD}$ L TRGYP |
| UniRef90_UPI00037F190C | A A A HGLT A EVEYDVQYPPTV |
| UniRef90-R5L6D4 | AESMLGECEI E |
| UniRef90-M0SX99 | A AVHQCTAFI SMLEEDFPFYP |
| UniRef90_S2X8P8 | ALQ D D A QVELDY |
| UniRef90-W4H894 | CHMHGAEGTVTLVESYP |
| UniRef90_G2K553 | A A $\square$ YGGTAEMIYKQGTQP |
| UniRef90_UPI0003146194 | A RMHRVDVELGYDRRYPPTV |
| UniRef90-X5WU63 | ARGFGGDAELDYRRD |
| UniRef90_B2TJQ5 | AKTFRAEA |
| UniRef90-11D717 | GEAHGCRVVADLLRPGFPVTV |
| UniRef90-G7UEZ8 | A LANGAQASLHWHAG PPV |
| UniRef90-D9W3K9 | A AVHGAHAETDLTEGY |
| UniRef90-M5DYZ9 | AKSYRGEAEVEIRKGTP |
| UniRef90_B0K3R1 | AKAMGGEVEFKRT\GYPCLV |
| UniRef90-UPI0002191707 | CAMYGAEYDLDFQKG |
| UniRef90-A0A024Q1F8 | EVSS DCVIEIDD G G N Y Y QVY |
| UniRef90_14BXB8 | A SGMRAEVEYTYTYG |
| UniRef90-C2D2Q7 |  |
| UniRef90-X5QEZ2 | A A A S LKARLDYRKGY |
| UniRef90_A8UDC7 | ELLS N CKI Y L DLD Q A GYYPV |
| UniRef90-UPI00035CFBEC | A A A G VGlle L S W |
| UniRef90-K3ZTJ4 | V H C CTATVDFMEDKMRPY |
| UniRef90-K9EVC9 | AEAYRGSAEFE |
| UniRef90-F2LMY5 | A A A Y GLGVEIDD Y D H G Y PVLV |
| UniRef90-H1HU26 | GESTGTEISVRYEPGPPP |
| UniRef90_A6FLQ7 |  |
| UniRef90_U2UFL7 | VKAYGCTADLTY |
| UniRef90-R9NE61 | A S A Y R T NVEI EVVLS DVPPVV |
| UniRef90_UPIOO03485840 | A QAFGGTAEVSFLRGVPNTY |
| UniRef90-G2KTU2 | A TSYGCKVDLKLNQGGYLPV |
| UniRef90-P45493 | A QAND\EIKI N |
| UniRef90_UPI0001FFF14C | ALA HGCTAEVT\\|VPGYPVTV |
| UniRef90-UPI00036CDC12 | A AGLNARADVRYEFGYPPTV |
| UniRef90-K6U8E2 | AKIMRADFELDF YGGCPAV |
| UniRef90-W5IWN4 | A AVHGDEAQLDYEE |
| UniRef90-W7IP11 | AEAHGCTAEVFVDRGYPVTV |
| UniRef90-R5IPY6 | AAMYGATAEMK VPSGCPPV |
| UniRef90-Q01B36 | AVAHGCEASTSFEPEQYVPYP |
| UniRef90_UPI000426B923 | CSANGAHVDYEY ${ }^{\text {S }}$ K D CPS $\quad$ Y |
| UniRef90-14F161 | ATAYGCTATVEIEDNEP |
| UniRef90_C5D0C5 | AESAGARAKVNFGP |
| UniRef90-D1Y1J4 | GAAFRCTAELDYRRNLPP |
| UniRef90-E3ILD4 | CAAMGATATLDFHY |
| UniRef90_S2KFR7 | A GF HGLQASLDYRRCYP |
| UniRef90_UPI00047813DA | DNFFGTKSSLDYQRGY |
| UniRef90-R5EBF4 | A A A Y G $\square$ K A ETVYER |
| UniRef90_Q65K84 | ETA Y Q C S GKVSYPAAYYQ |
| UniRef90_D5U961 | A LA NRANAEVN】EWGS S AVV |
| UniRef90-UPI000368343B | A ESFGALADI EWKEGFPSVV |
| UniRef90-W4HIZ1 |  |
| UniRef90-UPI00036C42E3 | GAAHGCRVVADVEP |
| UniRef90-A3PJZ9 | A A A Y GVRVEID Y E LG Y P P TV |
| UniRef90-D5RPE1 | AASFGCTAEVAYRRNGTPLV |
| UniRef90-K2JQ63 | ADSMGATATLTMPYGDSYP |
| UniRef90_UPI00034603D4 | A E S A G A S A S I D D T P T Y P A G Y |

UniRef90_S6K1T0
UniRef90_T2LAM5
UniRef90_J7SVK2
UniRef90_UPI00030F9563
UniRef90_A2TP34
UniRef90_U5C317

A
A A A D TF|V|AR|I|S GRG|I|DPVV|P|V|AAQ|VILJWQT\||PSRNLSLL|P AAADQVKIRVPHRSIDPVRMAGTLIQALHSVVSRDVDPIA



 SNNNFRIEVKGKGDDAFHACQVNALCVLVSRELSFTK P HLAKDPVTAAAEMVTALQVMITRRFDLFD A A A D A VHIVIPHQATDPVLALAHLVVGLNGLVGRQVDPTR A A ADRFD TVVRKGGDAI LAASQLVAQLNTVVARRIDPSE
 HAAYPHLAKDMTVAASQFVVQLQQVISRGADPDE AS S D G LE DKVTGKTDDPVTASAQVVNGLQTVVSRRIDLTS A SVDTAYVHLTGKGIDPVVAVVGMVQAVQTIIPRNVYALD A GRSNFDLTIKGKGKDALVAGAYFVTEAQTVVSRRIDPLE
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ASHDSFCl TL
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ACNDF
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A SANNN
A A DVF

A A A GK K L | $V$ | $Q$ | $V$ | $G A$ |
| :--- | :--- | :--- | :--- |
| $V$ | $V$ | $M A$ |  |
| $V$ | $F$ | $M A$ | $A$ |

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$\qquad$ A




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 SDGGHTARPHE TQDTVEALA QVVLGLGSAI DRRTDPAS GVD SVVD I H DP H R GK D P I V L G S QUV V A L Q N I V S R E I A P K E

 A S CNE FTVVKIVGKGワNAINAADQVYQQFQTIPTYDLDSK H A AVDTMEVTLHGRGIDDPVMAASAVMRLQTVVSREIAPBD




## A

A GCGFFKAQ GTSFK R R A GGDPVLAASSTIISL A D SMR
A D SWKVTVH GK S I D
 A A S D C L K V T F H GRRGI D P V V M A S S A V V R L Q T I A S R E V S V G G



 A A ATQFSII AVPHETDDPSPGVAAIVQGLYAIVARETSFTE ANNDEFHLQIKGSGKDPVWMATYVLQSLYSLNGRKVDPLD A NT DWFRVVVRGRGHDAIMVAAEIVNALQTIVAREI SPYE


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E LSTRAS $\square \mathrm{N} \square \mathrm{L}$ FEDGYP
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 AQTSDFEITVHGKGLDAIVVAAELI TMVQTVITRDVDPDD AMADS LKVTVYGQGIDPDIVQGVNMINRIQTIVSREVHPMK ASCDAVRI LI HGQGRDPI AASAQLI SAALYLSIPRVTDSQD ASADNFTVKIKGRTSHAIVAAAQAVLALQTII SRHLDPVD A GTDQLDDLFHGKAKDPVLMAAMAIVEFQTIVSRMIDPQQ
 ANVDRFAli R $\square T G K G N D A I L L A S Q L V T A L Q Q S V A S R N V N T R D$



A A DSMRTTVHGRGVDPVVLAAMTVIRRQTVISRETAPGE

A GGFDIVFNGTTIDPIVMMASKFVVDLQSVVSREKPEQE
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 A GSVTFRVVVHGRGVDPVVTAAHVVTGLQTVVAREAAPSE SADHLRIVVVNKGRDPIYAASQMINNLQSLISRRSNLTQ HGSRPETTDDPIVMGAATVMRLQAIVSREVAGGD
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 PHLAKDTI HPACLFV ACDRLEVVLPHLTTDLVTAAAKLVTEAPALLSRRVDARS AASDRVDVVLHGRGVDVI AVTANVI QTINTLTARTVDPTT ASFDAFKGTI PHDGVDAI WLLSQVLPAIVGLTGRFASPDE HAAMTSEGGDALLAACTMVTCAQAVIARGTDAFD ANVDRFHAARPHEGKDAILLASQLVTLLQSVASREVNTLD A GF GQFAFKVHGKGKNPIFVTSAILQNLQSAWVNMRDVTK HASQPNTTVDPVLI AASIVTRGQGVVSREVSPSE GCDT $\square Y V K F P H \square A K D T I H P A C \square F V T D L Q G I I T K N V N P Q E$ A GTDQMDVLIKGVGKDPVMMAAHFLAVQMAREKDTS AS DVIVEIVVKGEGKDPVVMAAMAVMGYQAVVSRSVVDSSQ PHLLAVDPVVIAAYLVTRLQTIVSRELDAGG A A D S LQ DR LF GRGIDPVVMAAATVMRLQTIVSRELAAAE AAADSLNVTLYGTTVDPVLLAAATTMGLQGVISRELAAAD SADNI DVTI PHTGEDAILDAAQLITSVQQATTRLVDARE
 ASDRIHVTLPHLTEDLTYALGSLVTQLPAVLSRRFDPRA ANSDTVDILVKGKGDDPIVLAARIVLDLQTIVSRETDPDD AASDELRFRLHGTGKDPVAAGAELLTRLDALNGEECVLSI SDAWRVTVRGRGDDPVVLAAHMIVRIQQSLKSREVPAQK
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A A A D NVTVRDPHLTVDLVDALGRLITE|VPALVARRVPANS
Unirefin
Un

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ARSNGVTEE
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LAAYG\DWDLEWIQG VPP
AAAHDME $\square$ DFVHRQGYP
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$A T L Y G A K S Q I D Y V R G \square P P V V$ AACYRAEGTVE
$\xrightarrow{\square} E P$ F GVVA DVVV VRGVPPVV
DARHGDRTEVAVSRGYPCVV
AEGYGCRAECSYRFGPSP
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VQSLLAPTGVGYELHHRRGVPP
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ANDHKAKSEINYVRGVPPVV
ATMHGAKFEI NHVRG

AQTYGVSYQLDYQNDYPVLV $V G E L V S P L G V S Y H L N Y V R G V P P$ LAPTGADCTINYERG R N V P P | $V A A T G A G V E V E Y$ |
| :--- |
| $T$ |

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A L Q HVV T QVG Q GACNLQDEVKGKGKDALLAGADLVSHTKKKEAMLFDKDT AVDQVVVTVPHLTADVI GALGAVATETQLLLSRRVDPRS ASDTIVI ELPHLTEDLVFALAQI AVNVPAVLSRRVDVRS AS VDWFKi TV HGLGVDAVY IASQUVVALQALVTRCTSPMD A A GDTVTLTLPHLTQDLVYALARLAADVPATLSRLIDPRH AGCAGVDFDV $\quad$ GKGTSPl NSLVAI $1 \mathrm{NNL} N Q T W A S G L N P N E$ HGAYPHLGTDPFWLLSQVLPALYALTARRISPLE
 A GCGFFRAVIPHHSVDPI LAASAAVISLQGIVSRESNPLD AAADRFE $\square$ K T SN KNSNLDAADF

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 MGVITVGKFNAGTADMTGTVRSNHNEVRLLIVRI
GTVMAWGNADPQEGMDRGTVRTGEHGTWMEPLVRSVIGEI II PDKVVTFGRTLRSMTSESNLARRIVREVI EA Q $T V V F S V T N V I P D S A S L S G S L R S L D P H S R A L E T L E D V C Q A T$ AVSVVWGQI I PAHGFMAGTMRCLDGEAWAGELLDDEVVKQV AVSVVWGQII PA HGFMAGTMRCLDGEAWAGELLDEVVKQV

 NVLI GVGKVTAGDAY
 EAVVSVGNVIPSEVQUEGTIRCYDETVR
T IVI TI GKI
SQVCLMFC
PAVFGCGMF $\square$ PDYVQARGTПRAMDAET
TLV $\square T \square G K S T K N N A S \square T G T I R H F N K E$
PAVFNCGMIVADHVQAQGTIRAMDKETDLKNSDQEDIAR PA S I KMTRFIPDYAEFAGDLRAQTNEVQLVEGLNDIVKGV GVNLTWGNAI PATGSVSGTLRCDD VRAWERAGQVLHDA






RNIVHIGHFHAGEAYLDEGTI RTYDMDDLIQNQMQKDAQSA PTVGTVGNDIPERVSFTVDLRDDDLERRIELRLRRLDDET PAAGSVGNAVPSSALVKMNDRWFNPKVRMLNSIKLMSDGA HNDIH I GQVRAGEAYLEGTIRTYSDLQVIKESLSKLVESV


 ACDAGVTNSVPDEARVVFDLRAAENEDMLQQKVERAILNS

[^1]



[^0]:    lupas_21
    lupas_14
    lupas_28
    jnet conf
    sol25
    sol5
    jhmm
    jpssm

[^1]:    lupas_21
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    lupas_28
    jnet
    cont
    sol5
    sol0
    jhmm
    jpssm

