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UniRef90_UPIOOO45E5238 UniRef90-UPIOOO3888964 UniRef90_UPIOOO2C426C5 UniRef90 K7G0E9 UniRef90-HOWV24 UniRef90-UPIO0042C5A2D UniRef90_I3M660
UniRef90- F1MLP3 UniRef90-UPIooo3F0987F UniRef90 UPI0003EBD7DC UniRef90 RoLNA1 UniRef90-UPIooo333857B UniRef90-UPIO0033163C3 UniRef90-UPI000332F023 UniRef90 UPIOOO42BC030 UniRef90-UPIO003315F2D UniRef90 K7FZV3
UniRef90 UPI0003C274A8 UniRef90 ${ }^{-}$E1C8YO UniRef90-UPI0003C83795 UniRet90_UPI0003EBEFA9 UniRef90 064244 UniRef90-UPIO003C8E039 UniRef90_UPIOOO2C68C23 UniRef90_UPI0004443B74 UniRef90-J9P988 UniRef90-F6WMZ1 UniRef90_UP100038EBDA2 UniRef90-UPI000328E096 UniRef90_UPI000333CB39 UniRef90-UPIO0033458CE UniRef90 G5BGC3
UniRef90-UPIO00273C6B1 UniRef90-RoLBX6 UniRef90-UPI00044436E9 UniRef90 F6ZFL7 UniRef90-UPIOOO4625070 UniRef90-W5KGC3 UniRef90_F1S5D9 UniRef90 ${ }^{-}$W5MUE 2 UniRef90_UPIOOO32B01C0 UniRef90 Q9MZ03 UniRef90 UPIO0046B1521 UniRef90-I3NBZO
UniRef90-F6XI43
UniRef90 Q9TTF5
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 QWRGPGTTAHTSETVLGRCFSYQEVQSELRDQDCQK
KQWEGAGTTAHISEIFLGRCFTYTQIHPELRDKNCQK EWKGRGTTKNLQEVILGRCYNYTTVNPELRDKDCQK

GA EWKGRGTTKHFPEIVLGRCLIVYQVRPAMRDVDCHK

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KLWTGKGTSQQLRS:FLGRCHDSVVLSPERDKNCTA

WSGEGTNRHLESLFLGRCYEYDFVNPDRRDKNCSA A WHGRGTSANFSQRVLKRCSSYSRSVPELGGKRCPE QWKGGGTTHNLKETILGRCFTYMRMVNPGLRKDCLK EWRGKGTTPYLREIVLGRCYNYVTVNSELRNKDCLK KWNGKGSTVDFQEI ILRRCYTYIRVQPELGDRDCQK FSGKSRTDKG STDYVSGU I GRCCSUTRIRPE

## $S$ S M G A

SGKGTSQRLQSTFПGRCAEYSLVSP RWHGAGSTADFOKIIQERCDTYTODRPGSDKNCSE WNGPGSTRNLFHIVLSRCDNYTQQQPDRSRNQA SPERWNGTGTTSNLQE VTGRCYNYMSMKKLSSVKNCMK KWKDRGTTKNLQEVILGRCYNYDTQHPELGDKDCLK RWHGRGSTADFQKLI QERCDTYTQPDWQGSSRNCQA CYSYQVISS
PGTTPNTRHTVVGRCFTYTTLINARGDKNCTA GTTPNIKHIVIGRCFTYTTLVQPEKKYDCEE WKGQGTTQNDQDIVLGRCYNYVTMNPGDGKKDCLKA WHGEGTSPQLRDIFLGRCAEYRALSSEQRGEGCVC GTTPNTKH VMGRCYEYSTLVNPGVRYDCES RWSGQGTDPHLQS $I F G R C A E Y \square A V S P E D R D E N C T A$ AWTGRGTTANLEEVGRCNDYGLNPAGKQNCE GTTPNIKEI AMGRCYDYVTRVKPGLRYDCED GTTPNUKQUADERCHRYVTLVNPNPKYTCEA FPEKCE RDKNCTA
SEFESTFLSRCEKFDHKHY $\square$ FFRYDCKK STPNDKH VVGRCYNY DT LVNPS $\square R$ RDCEE GTTPRIDQ\|FIGRCSDYQASHTMEHEVDCHE
RWT GEGTTPHLQS IF L G RCAEYTTLLS LGNKNCTA KGPGTTAELREIFMGRCWEYQRVMFKASGDDCQA GTTPYIEEIFVGRCWDYQYVYNDRDVKNCSE

NNPGTTDH $\square K E \square F \square G R C W D Y K E \Pi K P \square R T D V N C N D$
 RDKNCTA QTFKETFMARCH $\square A \square K G Q Y K G S D C E T$ PTFKATFIAKCKAFNA SMVHEDDCEK LKYVFITRCKEY配THDEVRGDDCNE WSAHGSTARIQEIFI GRCSEYQAVNKLQRQVDCDH QWKGRGTTKNLQEVILGRCYNYITTVNPLPHVMMHS GDGTTANLKALFGGRCYDCEYCSEEQAGYDCSG

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70 TEEDYQPLMKLGTQTVPCNKILL WNVFKNAFLTKNPCNI TEEDYQPLVKLANQTLPCNKTLL
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I WRRFEEAVGRQAPCNVTVDEYGRMFYAMAQTWPCGRF

I WKAFKNSFI SKDPCSITEEDYGPLMKLTNQTVPCHQTLF

I WRRFEESVVFRSSFNATV
L WMTFSSVFANDDPCKVQTAGYDKFDEKSSVPDPQDGSVF

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L WGVFEQAYVGRDPCEVPMEAYDPLDAAVPFKDECKRMMF
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VWNQFSRVFAFKEPCAVNASEYDNFIKEV Q
AWRDSEK WDRKENAACQSEAMERLLNVMERQADTDQSLF
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LWGAFEQAYVNKDPCNVPVQAYDPLIAAAAPFKPQCNKMMF

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UniRef90-G8XYP7 UniRef90_UPI00032A048F UniRef90_Q27312
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 WSRTNELVHQYSRVQQDMFTLEDTLLGYI ADKLRWCGDAN WQGSFILVRS RRNFMTLCDVLYGRVADFLSWCRQKH WENNKQLVHRYSDKTSRYMPLGDTLAGWMVDNLDWCGSLS WSKTKELAHEYAK RRRDMTLEDTLLGYLADGLRWCGEPG WSKTKELAYQFAKV HDMFRLEDTLLGHMADNLNWCGNSS WS GTKELVHKYAAATGYFLTLEDTLIGYLVDNLKWCGQTA WSKTGDLAHRYTKSNQNFLTLEDTLLGYMADKISWCGDPS WSKTKELAHQYAKK WHLMTLEDTLLGYLADNLSWCGEPG WSKSRELAHQYTKVQQEMFTLEDTLLGYMADGLKWCGDAG WENNHLLVTSYAENGRRFMPLCNVLYGMVGDFLSWCRQKN WSKTRTLMHSYAAVFRHFWTLENTLVGFMFNELVWCGQEE WSKTRMLVHSYAAVFRHFWTLEDTLVGFLFNDLIWCGQEE WSKTHDLVHRYTKINNDFLTLEDTLLGYIADGI SWCGNPF WSKTNSLVHRYTKASQDLLTLEDTFLGSMFDSLMWCGMSY WENSHLLVNSFAGNTRRFMPLSDVLYGRVADFLSWCRQKN WENSYLLVNSYAENTRRFMPVSDVLYGRVADSLSWCRQNN WSKTKTFVQTFVAALRYFWTLEDTLAGYMFNDLLWCGQED WSKTKELAHQYTRVQQALFTLENTLLGYDADDLSWCGDSG WENNHLLVTSYADNARRFMPLRDVLYGRVGDFLSWCRQKN WENNHLLVTSYAENGRRFMPLCNVLYGMVGDFLSXCRQKN WSKSKHLAHQYTRVEGKMFTLEDTLLGYIADDLWWCGDPS WSQTGELTRQYADIVKNVMPLESTLTGYMLNGLNWCGQRS WSKTKTFVQTLVAALRHFWTLEDTLAGFMFNDLLWCGRED WSKTRGFLERYAADTEPFWTLEDTLVGFVFNDLIWCRQAE WSK WENNHLLVTSYAESGRRLVPLCNVLYGRVGDFLNWCRQTN WSKTKDVVHGFTEKRDCFVTLEDTLLGSVLDGLTWCGKEG WSKTRNLMHSYAAVERHFWTLEDTLVGFMFNDLVWCGQEK WS GTYDFTHSYVKTVGNLYTLEDVLPGYLVNSLTWCGQEK WSKTRTLMHSYAAVFRHFWTLEDTLVGYMFNDLDWCGQEE WENNHLLVMSYGENTRRLVALCDVLYGKVGDFLSWCRQEN WS GDYFLAQNDANRGQRMFTLESTLIGYIMNDLTWCGQRQ WS GTYFAAHAYSALSQRLTTLEDTLTGYVAQQLDWCGQTD WENNHLLVTSYAENGRRFMPLCNVLYGRVGDFLSWCRQEN WENNHLLVTSYAENGRRFMPLCNVLYGRVGDFLSWCRQEN WS GTYDI AHEYAEAGKRFVTLEDTMIGFLANSLIWCGSG WSKTNELAHQYTKVRGDLLTLEDTLLGYMADGLMWCGSPS WENNYDVVTAYAQNGRRLLPI TNMLYGRIVDLLDWCRKEN WENNHLLVTSYSENGRRLMPLCDVLYGRVGDFLSWCRQKN WSKTKDVVHAYNENTKCFVTMEDTLLGSVLDNLIDCGKEG WSKSKDVVHEFTKKGDCFLTLENTLLGSVLDGLTWCGKKG WSKTKQMAHKFTQAKKCFMTLEDTLLGFI MDGLTWCGSQD WS GTYSFAHLYYRAVKNLETLENTFPGYLVNSLSWCGQDA WSKTNDLVHRYTKTNHNFLTLEDTLLGYMADGVSWCGNPS YSGMYSMAMA DGRQSSDFTNIEDTMLGGLVNGITFCGMVD WSKTKVVVHGFTEKRKDCFTLEDTVLGYALNGLTWCGKKG WS GVYDEAHDFADDGRKYDTLEDTLPGYMLNSLVWCGQRD
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SKINYQSCPDWRKDCSNNPVSVFWKTVSRRFAEAACDVV TTEMNYQSCPNWKTDCRSNPVSVFWNTVSKKFAEAACGVV SPG $\square$ NYESCPKWSE CESNPSSVYWKMASKMFAEEACGVV
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 TSDLNYQSCPHWRNDCSNNPGSVFWKAISQKFAEAACGVV ASGLDYQSCPT SGDCENNPVDSFWKSASQQYARDSSGVI
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 R V L L N G S I S N A F D R K S S T F G R R V E V H N L N P M M K V H T L Q A W V D H QV ML N GS LTEPF DKNS $\square F G S V E I F N L R P E K V H T V Q V W V M Q$ NVML NGSEPGAYPVK GFFADFEI P Y L Q K D K I T R R I E I WV M H Y V ML NGSSSSEDFDKNS DF G SVVVVHLNPARVMSSLQAWV DH QVVLN GS I S N T F D K N S T F G R V E I H N L H P G K V S R L Q A WM M H

 Y V M L N G S E S G A Y P V K K F F A D Y E I P P Q MLNGSLSEPFYRNSTF GSVELLNLNPRKVHTLQAWVMH HVLLNGSVHNTFDERSTFARVEVFNLHPEKVHTLQAWVMQ
 Y V M L N G S I G G A Y P V K G F F F A D Y H V $V M \operatorname{M}$ L $N$ G S QVVLNGSSLSNAFSKDSTFGSVVEVHNLWPEKVMTGQAWVMH $H V M L N G S E P G A Y P \square E G F F A D F E I P Y$ L Q K D K I T R R I E $\square W V M H$ QVMLNGSLSEPFYRNSTFGSVEVFNLDPNKVHKLQAWVMH HVVMLN G S I S K A F D K N S IL L G S V E I L H L N P E K V H T L Q V WV M H
 YVMLNGSEPGAYPVKGFFADFEIPYLQQDKVTRIEVWVMH HVVLNGSISNTEDEKSTFGRVEVFNLHPEKVHTLKAWVMH
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 Y V ML N G S E P G A Y P L K G F F A D Y E I P Y FK K E K I T R FE I WV M H QVMLNGSLSKPFHKSSTEGSVELFSLDPRKVHTLQAWVMH HVMLNGSEPGAYPVKGFFADYEIPNFQKDKVTRFEDWVMH HV L L N G S E G GA Y P V K GF FA D Y E I P N L Q K D K I S K I V I WV V D TVMLNGSQSNAFSRSSMFGS IGEVRHLDPKKVMTLQAWVMQ YVMLNGS\|S QPFRNSS IFGSVEIHHLNPEKVPLVK\|WVMH QVMLN GSIIE GAFRNDSIFGGVVEVRNLNSDKINGMYVWLMH
 TVMMLNGSIEKAFNKESMEGSVEINSLDPRKINHVNDKVID YVMLNGSRDTPFSKNSTFGRVEVFNLRPEKVHTLQAWVMH Y V ML NGSRTTAFSKASTRGSVEVVNLHPDRVMTLHAWVMH HVMLNGS $\square$ DEAFSQRS $\square$ F GRVEVHHLQPEKVHTLHAWV DH
 Q I ML N G S L G G A F P V P S F LA D F E I P N F Q R D RVVSNI S I MV M D RVVLNGSLENAFDSMSIFGRVEAPNLRPQ VELEAWLVH HVVLNGSLDEPFSKKSVFGSVEVFHFDPKKVNKLQAWVIH
 QVMLNGSEAGAFRSSSIFGSVEVFNLDPDKVSEVHIWLMQ RVVLNGSLENAFDSMSTFGRVEASNLRPE VELEALLVH QVLLNGSFSNAFNKNSTEGRVEDYNLLPDKVSTLQTWVMH
 TVLLNGSDADAFNRKSMFGSVELDSLNPQRVDHVNIKVVT





 HVVLNGSLNEAFDRRSTFGRVEI HNLHPKKVWTLQAWVMH YV ML NGSDPGAYPVRGFFADYEIPNFQKDKITRFE\|WVMH Y V M L N G S EP G A Y P V K G F F A D F E I P H L Q K D K I T H D E I W W M H QVMLNGSSLSEPFYKNSTEGSVEVFNLDPKKVHKLQAWVMH KVVLNGSSQTAFRTES $\quad$ GFGSI ELGNLDTNRISSI QLWIMD TVLLNGSVAQAFSRNSMFGSVELDGLDPCRVNYVNIKVVS TV L L N G S I H H A F N K K S M F G S V E L D N L N P R M V T H V H L K V V Y YVIMLSGSIKNAFDPNSVFGSVEVVNLNPNKVRSLQAWVMT
 TAMLN GS DINTP F N P T S I F A S V E V P R F I A S R V K N L N

 $N \vee M L N G S E P G A Y P T R G$
$T V L L N G S R G E A F R N N S F F A M H E L P N L S S E K V D Y L R V W V A H$

 Y V M L N G S E P GA Y P V K G F F A D F E I P H L Q K D K I T R YL MLD GSRKPAYSKDSFFSKYELPAL ENVNKIVIIVKH HVMLN GS $\square$ S QP F GNS S $\square$ F G S VEVVH HLNP K R V H L M KVVWV DH Y V ML N G S EP G A Y P V K G
YVMLNGSDPNAYPVKGFFADYEVPF LQKDK ITRDE\|WVMH

 T A ML $\operatorname{N}$ G S I I D K P P F S A K S I F F G S V

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 $E \| G G P N V P T C V D H S$
 QANSVVTNCTNASLKDLQKELDQ GITYNCKEV GRENYPMSCKNDSLQELEKTLDPK FKYTCT
DLDMNQSERCGAGSIKTLQDLIQQRNDAWSCSDN $N$ I G GPPR
SL N G DVT E K C VT G S L LEELQE D TT A K R TT F E C $\square \mathrm{D} D$ VI Q K N A K S N C K N A S L Q K L K K A L M H T G l T Y S C K D D


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SASGTTHNTKETFTGRCYGY贝ALQNFRPGVTCPS WGGEGSNPHLQSUFLGRCHDYLKLLSEQRDKNCTA TQQLK GTFI DRCKKFNVVESDCQK TPMSFPNDFI ARCQEFQEVIKENNPKNCST
 YSDNGTD DDLREI FIGRCADFKRVNPEDRMKNCTH TGPGTTPNITDI LTGRCEEYRKCLPFYRNVKCRA EWSAQGSTPHLAADIVLGRCFGYTQLRPELRDKDCQK I KDTFLKRCQKFK DLNCQN KPWEYKGSTPA IKE ILLGRCAQFEEDKPQNHDVDCAK HDVNAKHY LFFRYDCKK SEFESTF LSRCEKFDHKHYLFFRYDCKK RTFKETFVARCEDF

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GPGTTWNMTDVLLGRCVEYRQCDPYYGDVNCDA GTTPNTKEI AMGRCYDYVTRVKPGLRYDCED
 SNTGTTRNFKDUVLGRCYYYKEFMLDRSSVNCSS FAD VISRCULWTVTHN $\square T N V N C V D$ FKDTFMERCQKFK LQRLVIGGCSEWAFAHAEYN IDCQE

PS LLQMMVTGRCSEWAFTHGKY G DDCQN TSQFRATFRQKCQAF PETSQRCEQ K QWK GEGTTAHLYE LLGRCYTYTQVRPELGHKDCQK GPGTTHNITD LI GRCEEYRKCLLG
KKRWPSKGTSKHDREDFDGRCWYFDQVNPESTPYDCQK TPQKFQQUIEARCEEYQQVVKPGKPLNCTL

TSQFRKTFRRRCEAF PQTSQRCEQ GTTPN $\square K E \square I!G R C N Q F Q Q V S S Q N K N V D C Q Q$ FVGKCLYYQTINP QHQRKNCTS
PRVQESCED GTTRF DHE $\square \mathrm{FM}$ GRCFDW $\square$ RQNSASTTVDCFQ QTFQETVIDRCNDF $\begin{aligned} & \| V V D P V G R N V N C R A \\ & Q K K S D D D C K N ~\end{aligned}$

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 I WEAFKE VLKKDSCSVGPSDYEHFFANVVEGHLLDKS V WSSFEKTLLSQSECDVQSQLFDNFVHEMQQQPNQSGQYF I WEDF QQA YVNQDPCEVPPNAYDSEI A AAPDESSCNRLLF VWTDF QK IT DEHLCTMDPNMFDQFVELFKFEPEMKKPFF MMF
VWTEFEK LLTGEQLCTMDPK LIFDPFVDLFKHQPK LSKPFF LLSMFEEAYVGQDPCNFPDEAYHPLFVENPFIHSCDKTMF IGKAFTKAFLMKDPCSSTEQDYQLLMELTDEAVPCDKTLF LWDLFEKAHVNKDPCNTSVEAYDRLIDAAPFKDECNKAML LWEAFSKAFAYKKPCNVTEEDYRPFFELYKEAPDYNKVML LWKHFSGSFAFKGPCDVAPEAYQPFDEYADHDVDTDKTVY QPSISETESFGPTSA
VWT AF GGAFRGRDPVKVMKEDYQVYFDKDPDTAKVNSSDF AWFAFKGAFSGRDPATVAAEHYQPYFMVLPMQAKEDQSLGF K MTMF VLSTFEKTYVGKDPCNFPEEAYRPLFEDYPFTHSCDKTMF FWS LIF NSSFAFKDSCNTNESSYDLLFNLTKSSLLKDQAMF LWESFRDADAYQPACHVPRERFTQFVRDSQHAI ARDK LWADVSAVFAYKDACDVSVDAY LE LI SRDQQQVPADMSMF

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 WS R $\square K D L A H Q F T Q V Q Q D M F T L E D T L L G Y L A D D L T W C G E F N$ WSKTKDVVQDFARKNKCFQAVEETLLGSVLNSLTWCGKKD WENNHLLVTSFGENGRRFVPLCNILYGRVGDFLNWCRQTN WS GVY DFVSSYVQAVDDVLVISQTFTGFLLDKLTWCGRPQ WENNHLLVTSYSENARRFMPLCDVLYGRVGDFMSWCRQKN WS KTKDVVHEFTAKSDCFVTLEDTVLGAVADGLTWCGKKG WS GMTDFVDAYTAYSKTYTTI RDQLAVY। LNS DVWCGQEG WS GSSTLVHQFTF $\begin{aligned} & \text { SNDQHIVLEETMTGYLMNELTWCGSPT }\end{aligned}$ WENNH LLVTSYSDRTRRYMPLCDT LIGSFGDFLNWCGQAN WD G I Y DTVHSYAKEGRRSWSLEYTLMGYLINNLKFCGQEE WS GVMNIPQDVA QVTPEFSVLEETFPGYMAGNLSWCGAT WSKTNVLAHQYSRVQGDMLTLEDT LLGYLADGLMWCGDAS WS GTKDLVHDLTAKRKDCFTLEDTLLGSILDGLTWCGKQG WSKTKEVAHSFTQKRDCLVTLEDTPLGAMVDGLTWCGKKG WS GTRYIAHEYTAVQSNLYTLEDTFPGY LANELKWCGCKN WSKTKDVVHGFTDKRKDCFTLEDTLLGSVLDGLTWCGKEG WSKTKDVVHGFTEKRDCFVTLEDTLLGSVLDGLTWCGKEG WSKTKAVVHDFTKKRKCFETVEDTLLGSVLDGQTWCGKEG WEGTYELVTQQYDYGRRYTSMADDLSGYLVDGDVWCGTAT
 WS K S S ELAAHDYT RVQGDLFTLEDTLLGYMADGLKWCGDPH WENNHLLVVMSFSENTRRLLMPL CDVLVGNVGDFGLSWCRQEN WS GSQYYVHQLS DAGLRYFTMEDTVGGFVQNGLHWCGGS WS GVYT LV HRFAEAGHNYVT LEDTI IGYLVNSLVWCGQLT MSYGENTRRLVALCDVLVGKVGDFLSWCRQEN

 T GNTKPFI Y Q $\quad$ A N M G L R R F TMVVDTLLTVY PVNEFVWCGKKN WS GTMKLVHSYASYIDLYTTMEDTMAGWLVNGLTWCGNNA WEKNHLLVTSYSDNARRSVSLCDVLYGRVGDFLSWCRNRN HS QVTHVI R GMCKRLGVCRSLETTFPGYLFDELDWCNNSL
 H S QVM NI I R GMCK R L G V WSRSGTLAMAVCR LGGDCD LLEGT LPGFI FNELNWCDRRL
 WS DTKD LVHQFCKGRNHFVVSENSLLGNDMDGLTWCGKKS WSKSSEL AHDYT RVRRDMFTLEDTLLGYMADGLKWCGDPG
 WS GTK DWAHA YTHLLK K Y VT L D D T LA GYTLLNHVNWC GSEE
 WD G $\square Y$ D TVV H S Y A KE GRRSWSLLEYTL M GYLI NNLKFC GQEA WS GTFPVVTQPNPTGAVVYSSANEPSSAIINDLNWCGSKQ WS GTYSIVTQPNPAGAVVYSSTNEPSSAIINDLNWCGVEG
 WS GTRQQVHEYTY $\square K N S F F T L E D T H N G Y V A N D L N W C G K T C$

FCGSNS

WS GSERTSTS $\square S$ S ALDRDAVALELTHVGYILDDLRFCPGAA
$M V D G L T W C G K K G$
 WS GTKDIA HQFAKNKNNDYTLEDTFSGY DADALNWGDLFE WS GNMKTAQEWARANGR TT L EQTS GGK YLD SLLNLF ESA
 WSGGFD VSVYAQSKGH TSLEFTRDGKVVDQL

 WS GEMDVAK K $\square$ A K N K G G WS GGGDVAGDYAQKNQAFSRLEMTPGGGAL WS GRT LPATSSQTAKARGGTTMLDTV WS G T K EVVA A NVAK S K G G VTT L E T T I
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UniRef90 T2MFX4 UniRef90-UPI0003AFE038 UniRef90_13K690 UniRef90 G3NMH1 UniRef90-R7TMH6 UniRef90-Q4S1J1 UniRef90_V4AMV5 UniRef90-U6DYC3 UniRef90-G3IFW5 UniRef90 UPI0003596219 UniRef90_Q3TPZ1 UniRef90_A5HNF3 UniRef90 Q4S1J0 UniRef90-UPI0002B47BAE UniRef90-T1F4C9 UniRef90-A7SUA0 UniRef90 F6YSB4 UniRef90-Q86FH3 UniRef90_M4A1D0 UniRefgo_Q32tr5 UniRef90_G7YGU8 UniRef90-I3JGM3 UniRef90_G7YGU9 UniRet90-M4A1U5 UniRef90_UPI0002651D44 UniRef90 UPI0003941402 UniRef90 A7SQS4 UniRef90-T1FEY9 UniRef90-W4XGE7
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UniRef90 F2TYI6
UniRef90-H2MBF4
UniRef90-W4ZDU0
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UniRef90 UPI0002B43DC6
UniRef90-_R9VJV2
UniRef90_Q2SFQ8
UniRef90 G9RUE5
UniRef90-A0A022MJH8
UniRef90-E916V7
UniRef90_F3NFZ6
UniRef90 H1LV74
UniRef90-A0A017T573
UniRef90_UPI0004414653
UniRef90 R3GRE5


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 HVMLNGSRSKDFDKNSTEGSVEVHNDQPEKVQTLEAWV DH TAMLNGSDTTPFDSQS DFASVEVKRFKSPRVKNLNVVLV NVMLNGSEPGAYPVKGFFADFEI PYLQKDKITRIEIWVMH RVLLTSNKTPAFNNQS $\square F$ GS $\square E L P N L S P Q K V S K V E I M V M H$ $Y \vee M L N G S D P N A Y P \square K G$ TAMLNGSDTTPFSSQSDFGSDELKRFNSTRMESLNVVMVT HLMLNASSPAAFRENSIFATHELPNLNRANTPRLFVHMVS
 RVFFDSNRGGAFNNNSYFAQYELDNMDPDAVENVNIYLVDTM YVVLNAQRGGAFNNGS $\square F A T \square E A P N \square N Q D V V T N V A L Y L I P$
TAMLSGSTTTPFDPESTFAS TEVTRLKAPGVASMN VVM SVMLS GS IQTPFDPESUFATIEVTRLHSPRVRRLNVVLVM YVMIT GSNVTAYSKTSFFGKIELPTMGKKKVNRLVVVVVN T AMLNGS NTPFNPTSDFASVEVPRFNASRVKKLNVVMV TAMLNGSI NTPFNPTR $T V M \operatorname{NGA} V A T P F Y N K S V F A T D E V P R F R S P K V R S L K V V L V T$ II LLNGSAPQAFFNDSVLGEYEI PNLKQNKI NNVVIVTVV


SVLLGSPYGGAYRNSSFFALYELPNMNTSLVTADDVYVIT TLMVDGSNPPAYRRSSFFGKHELPSMSDAVNEVHVLVTH NVMLNGSEPGAYPTRGFFADFEI PYLQKDKVTRIEIWVMH

 HVLFNGSSRPMFSFRSYLVQHELDHINKTKVKKILAHVLN $R \vee M V N G S R$
YVMLNGSDPGAYPTKR
FVVLNGSAK LP FNENRTFGSVELPQLKYPKVKQLIVKLIH TAMLNGS TTTPFDTQR
$F V V L N G S V K A P F N E N K T F G K D E L P L L K H P R V Q Q L T V K L V H$ GLLLNGSLVTPYDKNRTFGSSELPNLYYPRVKKLTAYLAY


YVVLNAQRPGAFNNYSFFATEEAPNDNPDVVKNVADYLIP $T A L L N G S T D P P F N P S G V F A C V E V P K L D P K K V Q R L N V V I I S$
$R \square F S E Y E D P N L N H E V T P D I E V H L R$ RVFFDSNRGGAFNNNSYFAQYELDNMDPDAVENVNIYLVT

 NVLLDGA I SKPFDPTR

E LMMLNADSNTPDTNDSYFSRFELPNDKGPNVTSDRVLFAL RVMLS GSNPKAYRWDSYLEKYELPNM TDTGNKFTALII H HI LLNDGCEHAFRTDS ILA HEVSQDAPCKCS VHVWVVR $S V M L S G S \square Q T P F N P N S T F A T V E V K G L R S P R V R R F N V V L V M$

H VI
YVMIT GSNVTAYSKTSFFGKDELPTMGKKKVNRLVVVVVN HVFGTGAKKNDFGKVRTWWRIEKPNPNVNKVTRL $N V V \quad Q A Y E G A \square W K E Y E E P A L N K N K V T N U Q$ Y GFVKGSRDG $H V F L G R A Y S P D S V L I A Q E \square P Q L R V Q K \square N P A V T V L W H$ HAFTFGARMGPYGE RTWWRVEQP LLR $H \square F V$ RAYNPDS ILIDRLEVPELLVQRLNPAVEMDWH RAVV GSE $\square R P G N I$ WENI ELPNPNVTKITTI NVVL S RVPA GETA I FREVKVLAANPD V TAAVNVWLM


[^1]
 GGREDSRDLCQDPTI KELESDI SKRNI RFFCKNDY G 1 QKNSVTNCSNPSLQNLVTVLDK GUS YRCF EV GLNSKPIDRCGDGSIKELQNILTSHNFTWSCQDN

NLGSTPVEECVTGSVARLKELVEKKGMAFHC
NI GTNKREYCGSPSLRELEKDTAALNDNFECVD

 DPNEMYAETCTNGSVLYLQNFLMNMNFNVTCEEN
VLKKNAKSDCTNASLKNLQNQSDPNTTYTCKDV EKNAVT NCENKSLKKNLQNVLDA GI GYGCKEV $D \square G K T P K E K C G T G T V K E L V G D A R A A G I N V V C \square D$

QENS $\square T S C E N E S L K D L Q R K L D G G \square T Y S C K$
 YAGHETRSTCNDDS $\quad$ KKLLKSTLKKNGIGEACDDD

NG TERCGS GS LVA LVQD $\square$ KHHG LTP P CY D N

$D P N D K V R E T C S N G T V A S L R G V L T D L G L S N T C E E D$
$D Q E G A S R E S C G R G S V V D L I Q L L R S R G F R W T C A D$
NLDSKPKEKCGKGSLVNLVSDAKKYGDNVQCRD A GKSNEGETCQ GSLLAFREYVEKEGMQYECREN PAYRKNRESCGNGSVVTLVEDGTRHGLNVSCSDD

N LE S $\square$ PR H T C E S $\square$ N L LR $\square$ S S K VK S S N $\square$ S F S C $\square$ N D
SLEDNNRQTCESWSLQELANK LNSVHDPFRCDDD
NLEEEDVRGCNSESLLNLKADVLRKNITYVCTE


N LN S QFYETCDKGSMDLLKEDDAKRKDQMTCDDN
ELETNSGDNCTSPSDQELDS ILKEKNI RYTCYE RKGE GESCSEGSMNLMRSRVMERSIQQYDCYDVY KKGK GESCSEGSMNVLRSRVMERSI EYDCYDVY NPNEMYAETCTNGSVLYLQNFLMDMNLNVTCEEN

NSALDPRETCSGSSVE LVKRTLAKQGVTVTCEVN E

$$
\text { RRACQDKS } \ H E L M Q R \square E G K N Y R V E C \square D
$$

EKKAVTNCTNRSLKNLQNVLDAG G GYGCKEV
D पGKTPKEKCGTGTVKELVGDARAAG $\square \mathrm{NVVC} \mathrm{\square D}$
$P \square Y T T A \quad D G K \square R E \square S E D \square R$
$P \quad \square Y T G P$
$K \square S T P D V K G C D G V S L I D$

[^2]


[^0]:    lupas 21
    lupas_14
    lupas_28
    jnet
    conf
    sol25
    sol5
    sol0
    jhmm
    jpssm

[^1]:    lupas_21
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[^2]:    lupas_21
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    jpssm

