## QUERY

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LKEVGEANAAIFEMHQUMLEDDDYKESVGNLI
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| $A$ | $E$ |  |  |  |  |  |
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ETKMGKKEAADI F
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五 A RTQEVNAE
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 AALEDVANLFITMFSSMDDAYFKERAADVRDVTTRLKANL $A V W Q G V \Pi N E V A N N Y R H L D D P Y L Q E R \| A D V V D V G Q R V L R V L$

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| UniRef90-U4TMM0 | L |
| UniRef90-UP100047A58 | L |
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 EEAKLEYNNVTVTDTEAEVERFRNAVKDFCDNTAAQADAL EDVVI NKDKIDASRFENEIQRVLDAREQSKTQLEADKDKA
 PD DT $\square \mathrm{EKKE}$ K $\qquad$ DVO ETLSYTRKTGAAD DTDAET DRFTNAVQKAKGEDEKDKDQA
 EEIRYERRTIGEE EDLSFEAKQVA EQRAAEVERFQRSI QEAHQELELIKEKT EP【VLNTKKITADQUEDEKEKFFAGRAKAAAQLTACKEKA $V T H Y V L V A D E V P A E L A R F D E A L K A T R K E L E M L W G S I$ PDLTVEKQTI ENPAEQMNRFQQALAKAKEELEVIQAHA EQVSFDRSPVASEFTERETDKFKNAVAESVKQLTLIETHV
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LA WK Q T\|JDE S L K L F E E IIE D E Y IIS DR S K D|L|E D|I G Y R|V|M K N|L FATNEVANMMVAMFESMDNEYFKERAADVKDVTFRLKCNL
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 Y A L MSTAEKLAE $\square$ FKHMGNQYMAERATDILDASKRVVINL K A V E L A G E E F S A MLAA A M D D A Y M Q A R A A D I K D V T R R I L N NL
 N A I WR V GQ R Y V E A F E Q I D D E Y L R E R S S D I R D V M R R L L S N L HALK E G DDE Y S L MLS QLDD P YLRERAADFQ DI GKRWLKNL
 W A LTMA Q G Q I L V E Q F S L M D D A Y L R R E R G A DV R QV I E R V L R V L
 A A L Q R GI D D Y C E MLLA N L L E D E Y L L R E R A A D L R D I A K R WL WA L T T Q L E V VA R Q F D E M E D E Y L R E R K A D L E Q V V E R I L R H M K AI K E V A D K Y I VMF Q S M D D A Y F Q E R A A DV K DVVTERLI R Y I Y A L H E V T T A V V EMLLLE LD N E MVVRERAAADVK DV S G R VVMS H L
 A AVKAVIDDQFAAMFAAMDDDY LRERGSDIK DVGLRVIKNI

 Y A L N E V K D M F V T DF E S M D N D Y M R E R A A D I K D V T N R V L R H


 Y A L E D V A R M V V N M F E Q M D N E Y M R E R A A D I R D V T Q R V L A H L

 WA L A E QLDE K F GHYYF D D DE N E Y L R E R K A D F Q Q V V E QL L K A L YALHEAAQSFVTTLREMDNELLRERAADVEDVAGRIMNAL
 N AV H QVVVE K YVGMF E N M E D E Y L K E R A A D I K DVVGARIL K N I Y A V Q T I A A N F A E ll F S S M E D D Y M R A R A A D V K D I S N KV L G C L

 WA I K T A Y D K Y V N I F E N M E D R Y F R E R A A D M R D L K E R L L T M V W A L T E Q L A S L I R H F D E M D D P Y $L$ R E R R A D V E QVV WAITT QQMEVLVARRFE E IIEDA Y L R E R K T D V A QII A E RV L K V L

 GALR QVVMEHVQRFELMDDAYLRERAA DVRDL GRRLLAB L

 A A V
 TA F E E V I T R VI H E F E S M G N K Y M Q E RA T D FA S


 WAL T Q Q MQE L L V Q F E A I E D A Y L R E R K A DVV QVVVERI L K A M WA L M T Q L E Q I S R Q F D E M E D P Y L R E R K T D L E Q V A D R V L R Q M

 A A L E DVRDMFVGMFESMDNEYMRERAAD L R DVVQR L L K N L
 AS LAEVVEGYVK T LQ GMDS

 WA LK L Q CD A L V E QFEA I E E E Y L R E R K H DVVLQVVER I F K N L
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 RA AVRE V T E F Y A A R L L E N M A N E Y M R E R A A D D


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 VDVAHYF $\square \mathrm{DVT}$ QVDGE $\square \mathrm{DR} \mathrm{\square RDARDQVAGELNGLKRDM}$ VNPEKTKLEPHETTQELARYETARDQTSSDLSALLQSKV AK Y Y N DVEAEVLRLREA DDCVRSDIRRAAERL D A K L D Y N H Viccrer

 DTNLDYSSVKFTDSDHQKKRLHSAVADFSDETKSVVAELD LQKLYDKA VAEREDT DTAAEVKLFETALEHVRSDVVAASARLD

 A A S R P E ERKRF Q $\square$ A LEEKAK $\square$ QTLLYMEKR V

PDLSFEKKTTKPESKDAELAKVEKALQAVTEDLQKNVKTLL V



 VPR R R T V V S D D
 PVYE IVSPEN KENE DKRF LQQAVVDKF DEKTM KMAAEMA VIP DRKVT DVEAELSAFNAALLADRKDIGKAGNRLL LEVQHYK\KKADLDNEKNRLSQADALVKKDLKNGKKDA LEV N H L VVVAPR HV DAEVVRLLEDAAA KVRFE L R A V K E S A ENRRIYVKDVEKEVMRFQKARQKADLELKILYDTA VDLDESERSAADPETELQRFEAARETAADELARERSRT





 D QTVPE PRDLET GSPAE ERGRLGEAVDAAFERLLRELAGHA

$\square$ S VD E Y A VR

 IE ITKK TKVVSDI E V S K L E N A V N K S I E E D L

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    E P R
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 K A E D S E H Q L Q R F D V A L B A DLSPEERVIE EA D D DS E E L
E QVE \(\square \mathrm{DREFV}\)
LE RLDLA I
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 VREY LIVRSRPEERSRFQTALEKAK DETDCMEKRVV VRE Y L I P A F S \(\square E\) Q E VE R L LD A I E L A K Q Q L K S I R N H I

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 F D E S K \(\square\) T S L Q I D D E V K K F N D A K L K A I

C S N ILE E E L S F F Y T S L S A VR N DI \(\operatorname{K} A \operatorname{A}\) G K K L E \(\square\) N T Q S \(\square\) D E A M V D A E ERRRTVDP PA G E A L R R L R E A K E R R C L
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\(\square P A T R \prod D A E V E R F F Q A V Q V A A D Q L V E \square R K Q \square\)


YPQQQ GESVAA ERERLHKA IGEVRSDDEND DQRS \(\square Q \mathrm{~V}\) A E Q R \(\square\) R S S E V


EPTLTDPPAPET \(\square D G D D E W N R F L T A R Q T A K S E L Q D E R E Q T\) E QPVEIPERATGSPTVEQHRLGDALAATAGELRTLQRRT
 \(V P D K D G E D D A E A S R F R Q A V A A E L A E L Q R L S E R M\)

 \(V V P R R T\) \(V P V P E Y K \square P A A R D V D E C A R L A E A A A Q G S R Q L G M L R G R A\)

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 TQSVGEEAAAIMGAHIEFAEDEGIKDMVSGSI DAG MCAE RAKLGKDKAAI LKAQQAFLNDPSFYPEMEKGI RQHKYSAE QESLMAEERALFSVYLRMLDDNALPAE INAGI RGGNW AQ

 GARFGADKAAI FQAHQELLGDESVVQDTVARILDGHGVA SQR\|GTEHAQI FSAQQAMLNDPEVFNNAKTKI MDFNGEAS
 EDKYSADLAAIFSGHHTLLDDPELYEMACEVMRDKPCRAE VA QF GVDKEGIFEGQMLVVEDSELSDSVISLIKHENYCAA
 EREFGKDKAAI FEAHLMLVNDSEFHDSVKNMIKNEHVTAD RAHLGDEEAAI FDAHLLLLADPELETAIEAGLRDG LNAE

 LDQLGPEKAEILSAHDAFLDDPSFTGEMKARIENQLCSAQ V DDAGEDSAEVFSVHAMMLEDDDLIDATKEDI QTQKHNAE SAKGPSEARELLETFRMFADDAGWDSRISEHVRAG LSAE TPVLFGESRDVLETYRLFAHDPSWETRLHDAIQSG LSAE TANSQKDSAAI FDLYSHLINDARLKRELMNEUDAGSVAAE LKKFSAEEAAI FEAHLLVVKDSELIGPINQKTADEGVNAE KGKVNEKEDEI IEAHILLLKDPMYI SDIKK I I E KEQKKAE PEEL KEHGAI IDDHLMI CQDPKLVDSAAKNIADRA ITAE GASAQKESAAIFDLYSHLLNDPRGKKRELMMRHVDGGAVAE
 NEQLPKDVAAI FEGYKHMLADASLAGDIRSKL SQGYRCD A GK GEK DLE DTA HLMMVLDDPVYISDIEKKY QKNRTKAE
 LA \(\operatorname{L}\) Q G E H E A A V F E A H L TV
 E G A S E A Q S N I A A K A H T E L L S S D P Y F T R D T I N E S K I D D GEGGGEH DDILRTYRMFAE DRGWMERVREGVRS G LT G E E K D L G A D K A A V F E S H M M F LD D D P D F I HGALAREVNEFIDDAHSLLLDDPELLRGLDDLVKVGHYRPG
 SPGAPA ELSSAFVDLHAMILADDPALTEAARDLI RDRRCNAE RAGGSESEAGVEEAHVEMADDPELHEGVE ERVRS LESPE
 AESVGEEEAQVFDAHIMVLADPDLSDDQTTKIKEDQVNAA

 \(R D V L P S E E V A L F E A Y E M M V Q G G P V V D D T L A R I R R G N W A A Q\) GTTMAAR S I K D I F A V H L L R Y L R D R S F R K K I T D L V Y Y S E S L T A E PPEM TQPLSI I DAH LLMLKDPSLIDKETEEFIRRYYANAE



 GDSLPEDVKAI FQLYHQLLDANSLGREVEQKIRRENWDAA L Q EVV G D E E R V L
 KVELGEEEA QIFESHLLVLED PELLLGSADDKVKSENVNA D
 KSKADRE IVDTHQEMLE DPELTNEVEARLNNDESSAA HGALAREVGEFLELHALLLDDPELLQQLDELIRRGRYGAD DVPTE GEHREVLETYRMFAHDQGWVRRMEEAIRNG LTAE PEDL KEHSAII ESHLMMLRDHKFRKRALDHIALSRVNAE F E V H Q MVV D D D L D Y V E S II A N V I Q S Q K I N A E
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 QAVSEAYDQYCTMFSQMDDPLFRERAADVADVKTGLLADL K AVNEVVEKFARLFE GMADAYLKERAADVRDVGRRLI R QL GAVRKVI ESHTAHFAQMEDEYLRERVSDIRDLGRRLILARLC WALQRRRNELVRVFDEMDDPYLRTRRDDVEHVVGQIQDAL N A V H S A V E E I I V Q F D S L E D E F F R E R K N D V F DVVAK R L F N H L FAVREVANMYIGMFEQLDNEYMKERAADIRDVTQRLLAHL Y A V K E TVVEMFEG IFFLSSMEDEYMRERAA DI R DI GGRII R A L WA YQAVTEGRVAALQK LDDD T LAAARAVDLSDVQRRVL RHL FAFK Q TMSEMIDLFELSSNNPYIQARIPDLKDIIKRMLRIL A AVERVQNETRARLMRQTDPYLRERLHDLDDLANRVLSHL

 Y AVY L S F K ELLIA GMEK YTNNYGK ERVVSDFK DI RNRILI S NI A A L R DVS GMF Q L F K S M E D P Y M Q E R A A D D K DVVS R RV L A A L YAWSRVILQHANTFASMHDPYLRERAADVRDLGSRVLGYL NAVNQVIVEQHASMMESLDDKYLKERAVDLRDVGSRII N NL A A LVGASSDTG DAMFE R L E D A Y L R E R A A D L S DVVRNRV L A H L
 YAVGVTADNFANMFAAMDDEYMKARAADVRDDVER DV SLL A AVQQVA GEFVALFEGMDNDYMKERADDVRDVSRRLLKNL Y AVVTAFNNQARVFAEMDDPYMKERSADI YDI EQAVLLNL WAI K R QMDRLVEQFE QIDDAY LRRSRSADVVQVVERVI KAL A AVRKVDDEMRLLRLSQVSDPYIRERLHDLEDLANRLLKRHL
 WAVKQVI RRFAEQFA NLQDPYMRERAASDLRALGRRRLLA F A L H E V S S M F VA L F E S M D D E Y M S A R A S D I K DV T N R I L A H L Y AVVKETTEKFVVRLFENDDSPVYRQRMLDIKDVVNRILIEAL WALERS DD T IGKAFSAI D DP Y IR DRMQDVRVVGDKIMQAL WA V K Q VT E HFA D QFA S L Q D S Y MR DRAS D L R A L GQR L L F H L

 D S V K I V V T D K Y I S LDF N K Ll E N P I Y R R Q K V L D I K
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 A A V E K E Q S A A R S R M E R V P D A Y L R E R L L H D L D D L S N R L L R L L
 WA I R Q V V E A Y S A R F A N M K D Q Y L K E R A Q D
 WALKKVSLKVKTMFQKLDDPYLQSRVTDIVQVSEQVMRHV



 WA WH QVLMELS QQYRQLDDPYLQARYIDIEDI LQRTLRHLI S S L K MVVEDYAARFANMDDPYMQERAIDIVDLSNRILVNI
 DAVYTATMKI KKMFED DPDP YLLRERAADVEDVGSRLERNL S SLLKLVVENYAAKFAAMEDPYMQERAVDIVDLSNRILLHNI Y A WS EVV I LDD HVGKT F S A M P D A Y L R E R A S D V R D L G S R V L A Y L
 WA L QLRRRD QLMRVFEDMEDTY LRRTRKDD L DHVVNRRIMAVL FALN EIKEMFVGMFEAMDNEYMRERAADIVDVTNRILRRHL
 A A WA TVVDETAAVQQE QLQDA LLAAERAA DL R DVVGRRVVLA Q I
 A AVEKVQSDTKARMMRLTDPYLRERMHDFDDL ANRLLRQL WS LERAVGDVQEIFASIADEYLRQRMQDVRLVAERVLGKL FAVATVGDNFAQMFQAMDDDYMRERAADVKDVSNRVI RIL Y A V A VTG D NFA Q MF R A M D D D Y M R E R A A D V K D I S E R V L S L HAVS ET F S EF DE QFE GM S G Q M A E R A D D L R DVVR D R L I R L L LA WGSATEDIAQSIAGLEDDYLQTRAADIRELRGRVLHSL W A WH QV LS D L S Q Q Y L Q L D D P Y L Q A R Y lid il E D I L S H S L Q H L A A V Q Q V Q N D N R A R M A S V T D D S Y I R
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APGDPAAETARFHAALAQAKTELGVLAA
PTAPKD LEAEKDRFSAARDKF AARTNEQDERM ERVSAPARHVPVLDEATELSRFHTAKETAASQLRALYEKT EEIKISKQTIT DTNKEILKLEKADEESDGELESLRENT EOV \(N \square H E\) A GQ PEQTFN HEVGTGE EQERALLEAALVRATGELRALRESA
 \(K P G D R M \square E A A A L E Q A L V A A R N E L A V V A D E V\)
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 EPLLSDVSPASVGGEETEKYEHALAMAKKDLETMLES EPRVVVTNPV ADDPLTEDDRI REAVGKLRVSVDDLLS


EFD VVQT TVDRPETEVVARLDDSARNTAQASMQQLVTK M
VDS
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 ERAAEVFKQSAADVRMEHSRWEKAVDDVQSHLQEQYSKA K QKQLFF QAVAATHKEFSTLAASM
PENTPSTAGADAERARVREAVSTVARELNER
STLDTALERERLTAALEEASGEFRRYSKRF EPRVVVTNLVADDPEREMERLHEAVDQLRVSVDQVVASA DSQKQLLRFEQAVEKTRUEFDVLSSQL TSAA \(\square G Q Q Q \square R L K R A \backslash D R T L E D L\)
 PSLLSTPVYKI E ESDVEDEYKRFDEAI KKS IVEEI EQLQNHV VVRKYPVRKEDVTEESARMRQAVKKSETEUSQLIDKKM

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\(\square\)
PE DT QRTVDSPQEELSR TESAIDVVVCEL

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UniRef90 UniRef90 \({ }^{-}\)C2BDA4 UniRef90－UPIIOOO35C9AA9 UniRef90＿D3RVG1 UniRef90－F9U900 UniRef90 UPI00036E3DB4 UniRef90－UPIooo3B4BEC8 UniR Refo－TOBSW1 UniRef90－D3PD51 UniRef90－A6BIW4 UniRef90＿R5EF48
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GENLSESELE：MGAHQMLLEDVAFVEALTGY｜
AESLDKDQKAVLEAYRMFANSRGWLRRMEEDIQRGGDSAE

EGAGSAARKDVFAHLALLDDPEFTGAAGQGADGQ SAE KGRLADEELEVFDAHIAALSDPEMLGQ
GNHLPGDLDALFGVYQMMLNSPELKQGVEEKIKQGD SAP
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\begin{tabular}{l} 
S \\
\hline\(G\) \\
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VP R Q S S D D R R GE L R AFK Q A L S QVR DD DE S VAENLL
 EPRVVITNPI A ESADVERQRLDEARMADSGEVGALVGRS
 RDPVVPGEPE TEEDERFAAQHVGSSLIE DLLREMVARL
HYPARGESPE DEAQRQAEAKATVATEEGAGVAHS



EVNS QVELD KLSKAI GSLRLDS DNMLSRS
 LDVVAHYF V DP GQEEAEVVNRLVAARSAVRAEELQTQQAAEL



VR S \(\square E P N Q V V D S E D Q R L A Q A\) L T EAAARATSDAVNEA


 P P P D LAA A GDPDSEAARLDGALDAARKELAARERRT
 D PVVP A A K F F A G D Q E L E A E R L T T R A L L D L K K S I D R M M A I D VDVA H Y F \(\square\) Q P D QVT L E \(\square K R\) R L K A R D DVVDELQR LQ K D M

E Y A EHASDAEHEISSLNSALKEGAAQLQTLVHNA MRKIFNLA
 DDADLDPPEQAS GTSAAESRLLDNAI ASVDADLGTTVRDA





K A I K R T R GQLT Q IKEQ I


1 A SAD QQ GE WQRFEQARHLDARAELQHSAEVI K R KI ESVN D L D E K R E VLLEKA LIKKT K E E I E LTT Y E NL
 RVVPSGERPAEQSRFDAAVAAAEGELEKLAA

S SVKVESEKFDDADHQVKNSIVRQFIDAQS DP \(\square\) GEPEDVASPAEPDDEYHRVETALTAVTGDLVELGHRA \(\square D Y R L L P \square N E \square P S E Q A K L K D A D H Q L V Q H L N A G L D K\)
\[
E \text { QP QLRRCQDPVVVESLRLNS A VVRCRDS ISS SUS QK F }
\]

NEKPLEVIGKQKCSSVEVE IDKLTSSSLSATQAKVLGLKSAM
 A E L E A ALVATR D EL E E L A V D T
\(\square R \square R E L T L P\) Q E E VIE HE \(\square\) N R Y Y Y K A L LD GALVEAKA ELR QVAA D M \(E L D V P D Q P V D L V A G A L L N D A L V R T R A Q M K A L V D D T\) \(P P S L P E R E P E V V D T P A E Q A A A R D A L V S V A T D L E G R A A\)

E D P E K E V S R L G Q A lic \(\operatorname{G}\) N L R DS RF LGA A L H R S E K E L K K I E R V T




A L LD QA LN QARQRMVAL DD S T
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\section*{DAFKDADGELT QLEAAQ}


 A LLHDALLRTRRQQLQA DEDDT

\(S L D V R L I S P T G \square I K E Q \square K L K G A \square K Q L C Q H L R H C Q G N F\)

 VP HQE LS \(\square E E\) VP A E VA R YE QA \(\square K T\) T R R QL E Q L R T D A

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LK K I E R VT
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\(L\) N N A L I A T D Q Q LA A LA D D T
SDTVAAERDKLRQAVATAVVELRALADRS



SKATPEEEKTSLREADGKAVSRLMAMVETA V V VE H TVVA EVVEVERQRVYS A FR QMREQQDRMMGQA \(H \square S E S E \square A A E E K K L N D A R K S Y Q A E L S Q L Y E K T\)

EEMAED
T NAEQEFAK LK QA \(\square\) A D VK QH LEA QAK \(\square\)
DAPRAESVSAEHEFERVKKSLAKVQEDLNARAEAA EPTDPVEGAARLDAALKAADADLDQVMADV
 DVPGDETRPKNLTADAEFGRVESALASVNKDLLARAKAA


 DEPQ DEAKTE IVSDTAAELRRYENVKKKFDADTQQEELKK \(M R D D V Q G S L Q Q A\) VP A DLP A P D DVT A E A T RVREALSAAGDALDARAAAA


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DP LIPEPGTEAFTGDADAEVARVADALSATADDLAARGARA


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 PARA DPAAERRRLNEALLREGGEQLEAALDQHA
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I D ELV V A G

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TVKA \(\square R E\)
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 EGQVPAAE DSDA a GVLDFHLAMLDGD RQEDGENEAAI FRAYDEMVNDDVFFDNPLKRMKEELINDE RKRAGETGAD, FKAHQELLEDPSLLEQAQALIAEGK SAA QDALMAEERALFSVFLRMLDENALPAEDKAFIREGHW AQ \(A \nabla G T A Q S\) DQDGAKQAA QAKFGADKAALQALGQMAADPALLDSIKNLVDVGK SAE DTATGGEHRE FGAHKELLIADEGTVQDAVSHILDGHGPA DGQGAKDAAPILTALAQMAQDPALKTSIRSLLDGGKTAE ADEGAGKARDVLEAYRMFANDHGWSRRLSDAVATGGTVAE AKEGARKAAPILQALAQMAVDPALVESVSLIASGKTAA ERAVGAEEAAVEEAHVQFLDDPQETENLESGVEEGLPAES SGDEPAPEYAVLSGQAEMLADAAFIATVEETLRSCSCDAE KLKKNDKTSLVLQNQUY! EDIIEMNQQUIGGFIENEHLCAD RLGGDENEAAI FSAHLLALLEDPGLLDAADMLI DQGVGAA REHGRDEAAQLLDAQAMMARDFVLADRAAALVTEGNAGVE

EGPA ADCLTMTAALAADPALRDEVHAGIRAGEPTA KDEGTKQAAEILTAISMFASDPQLAASIKDLIAQGKTGE PEMRDGEHRDVLETYRMFTEDKGWLNRISEAVRTG LTAE AGDAASEEAEI MRSYDA LIDPELEKDIVQRI REQKVFDS MGMASAAI FGAHGMLIDDEELHQAMAARIEHQRVCAE NQKAEAKEMAILETQVILTEDPMLNNSFKDRI RKQGENAF SAEC ENYQLIEADLLLLQDEELDEQVKDABCRTBQLSAS K D EAGQGEH TGHA S \(\qquad\)
AEVEAYRMAQDGURTAEAVA
VAMAGMVRDRWRKAVKKGUGGHSAE AGKGDTARKAILGAHLAFLEDPELLAAAHRLIADGKGAG EGDA KAVLETTAAMAMDPSLSSRAEQLVRQNSGPAP DGA

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\[
\text { DDPAHERAA } \square S \text { SA } \square \text { ENVDHS KTA GQA }
\]


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VEERRV GDVEGELERLSRAGSLVRERLEELK
CDDCAEA पHTFLEAVAEVRRQSD E A L Q T L \(\frac{\mathrm{Q}}{\mathrm{T}}\)

LVVDERR】AAGEVEAE \(\square\) AR R LDAA \(\square\) A QTRDELRADRERL （DAFDAVAARLDDLSVSL PELPTAGETVAEEQRDAEYDHFDEAAD乌VASRLEQR

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E Q A

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 \(\square A D A \| D V A \square G E L E R \square A E G A\)

ERLEAL
\(\square Q \square A E Q H \square E P A A A D E E \square A R \square R G A \square D A V R A E M H E \square R A R \square\) l DEVAADLEARGARA
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 A GPM
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 DG K ARP
S P EAAE

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 D G D A

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PPS LDPEKRMTAGAPADEAVEARRALERVAD

 PPVRPPA DEPAVVDDQDTALVTVVAAFESVVVVLEERAATV

LN A P DLPE HERPAAMTAFDDAADAVVVNSLRTRASKA E E ERDR LLS AMD HL R S RL A IS SEVVS \(P \quad L D Y R \square L P D K R \square P\) Q Q L S R R L D G G L A R R L K Q Q L S A S L Q A L \(T \bigvee P\) A NELVPADPAAAKEMVEQAFADVAAGLRA QAGRA


\section*{\(E \square S E D Q R P E E V A R F T A A A G V V A A \quad R \square R E R A\)}

IDPDEPACTDPE GDAARVRAVLGEVA DELRALNAQ

 ATGNPAEEQAQLDAALDAARAQIRRLHGDV PEVVAPGSARDDEASREAEKVRFEEAAADVVSQRQLRDRAA SV PPAK S L N E ERS QLNS GLEAVVK SLLT QL N S S

 E Q A I A S FMHVA DTED QKA PRPCPVVDPGREVDRAYAAMDAVSDD

A ELTALDDALCQVRDRTEA

F T VE T \(\square\) P H H K VVE E LDD T F E E VRTK VK QYYRNYNMDT
\(L E R G \square G E V V G E L H H Q A H G A\)
VDKETKLLNEAS LIVKKRLEDLK
RQHQADDI KTEQRNFD DARRHVMMTGKEEYDSA EPAPDARLSDGADVAAEGARDADAAEQVRADLERRAA FTPDSAEDPE E QLE A DRERFVTAATTVAGRLDQRAALA P
\(\square E S E L Q S A L K A L L Q L L L K K Q A\)


 PRFD \(\square A E Q G Q G A E Q E R \quad G A L D K A L D \square L R T\)

PADPATARQVVDDAFTHVVDDLRAQSARA \(\square D \square\) Y K S Q P A N VQ D P L L LE H S L I A LA E Q L N H Q LT S L
\(\square E H S \square\) T L A E Q \(\square\) N Q Q
\(R R \square A P G S D T Q A A A E R \square A R S A A A V R D E D D A \quad A\) \(P \square P P E D R P A \square A D S L E E \square C K K V G E E L G F E R S A R A\) P P P S L P DQR PTVVDPPGEEAAR \(\square P E \quad L P\) T T GE GVT \(\square E R A R L A E G \square A A D T A ~ D L\) F ERSARA
A ELLES
 A RLEAM K P D D D RA E LDD K L S H A ID K A A K L LD A

\(R\) R R D R A
EELADDRQFVQQHEDEGESTRFAAALESTDTALAEPGGGA
E L P DVPPSA GE GVVVVERERLAAALASVVGALDAEAAR IDESSPVAESDRSAER DRRLA H AVVDAV A T R L T T R RASSRS LQQ Q E K N A V DE GIDE ILLK
LT P Q Q H E T E L QTK LD DGLK TLAERLQ
 A VA AP A V Q R A A LDTA A L E QVRR EL H D
WRPESEAASQADPAASTGDDEAA LHGAIDASAGQALAA L \begin{tabular}{rl}
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QQ I L K A
DGRGGDKARA I L G A AFLEDPELAAGARRLI GQGK SAG A A TA DPSAKE L E A GVMDARDPGLAAAVDERLATGAGAAA


 LGQTQG
D A
H G A G \(\mathrm{ES}_{\mathrm{S}} \mathrm{R}\)
A \(P\)
S Q N T G
E V
Q
V
A
D MA A

A LA TAGLAEDRGWIGAASALIARGASAPS RERDG ESK TVL S A H L S L I Q D DEEFVGN DRRLMVERHLALG E A GDDAGAILRATARLAEDKALLAAATQRLRAGAG VT RKTESQDAR
DAEGG
E G
AARSGA
S GAA
EHTEGE
DKAV
DKAVV VDILEAAQSQLLLDDEELIRQ A ARGAAAEAGUEACLLEREARNA EGTTGE VLEAQALMLEDPAVHASVAEHAARGQ TAE DAAGPAADILFMTSALAADPALLDQVRTEIRDGTPTA A S QLR K E ERALEDVYLMMLDDASIGNEVKR\|IRTGQWA
 A AKGDSARKAIL GAHLAFLEEDPELTAAARKLI GE GK SA G
 AS RAS GAAAEVLQATAVLVEDRAWRGATATKI RSGS DADV SEGHDESEGT \(\ M K \square Y E H \square M D D P A F K G Q V T E Y I S R K N Y T V E\) R R S G Q R A A E A D I \(\quad\) F E A \(\quad\) H ALLGSTQA QI F RAHQELLED P

GVS
SAVLETALMAADPTUVTAAQRKLDDG\|APA
 QRRLLGASDAAI FKA QAELLNDTDLI T RTCQLVVEGHGVA SSE GECKEILEAHLKI AQDEELGRALLMMQNNALNTL LE N A S GVE
D S T S
D GSA
DGA A



A F V G AHR SLVGD T S L R Q HLLMA GV SH GLSSA Q AD EAAQILDAQS QLLEDETVEECLLDEHDARNTLA \(P \vee A G D G A A\)

K G Q S
\(K T \square I N A H \square S L I Q D\)
 A Q V L Q A H L S L V S D C E F Q Q A L Q R L L P A VA T V A Q LA SLKGQSKTIINAHLSLIQQ KEFSQNIVRHLNQRKCSLA
 A QAAE GDSAALLYATAAMASDPS LVADAQQRVREEHLVPE
 A A DL Q GDAA AVL SAQA LMARDPEMARRAAERTDAGDPPAA ATAGGGQ \(\square G G V L A A H R A L L D D P D L R G R A E A G \square A N G M A A A A\)

 KK SAGDKEAEI LE GHVVMLSSDPFML
 A HATGA A S EVLAA TAALA QDRA WLGAAEKRIVAG T PA V
 E Q CAM M G
V G A A G GVL Q A HR A LA D P D L R A R EKENRDDESNVLDAYRLI DNDP
 \(\qquad\)
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RAVS DAMAVY R E MLL A S A G
WAVHAACGAYQEVL RAAG
QAYWEAMNLYENLLKESTY
 TA A A N AVVE EYAA QFEA L G \(F A W Q R A Y T\) GYFAERVVDLRDVGARAVAAV




 S A I A R A S LDD I CH QLE N S S S R Y L Q E R A LDD L D A A QLI S A V

 A AVVA AT E QFAAVVFT K L G G L M A E R V T D L A A WNQ C G E QFA A DLLA A H A D A R Q A E R A A D Y R D V A R R V L
 G A V H G A A A H Y A E K L A R A G G Y L A E R R V F A WV G T L L A A L A R A V D A L R E P F R Q S G S D Y L R Q R E L D V Y D L

 A A L S M A DE E LLS L P F R S S S N E
F A WR E T R A E A A L L S R M P D P
 HAVTEAVAHF GA QLAA LG

100 Y A 110
120
EYMAARVT D|L|D D|V|R D R|IV|AR
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\(G\) & \(Y\) & \(L\) & \(A\) & \(E\) & \(R\) & \(A\) & \(A\) & \(D\) & \(L\) & \(A\) & \(D\) & \(I\) & \(R\) & \(D\) \\
\(R\) & \(R\) & \(A\) & \(I\) & \(A\) & \(A\) \\
\(V\) & \(Y\) & \(Q\) & \(Q\) & \(Q\) & \(R\) & \(L\) & \(C\) & \(D\) & \(L\) & \(Q\) & \(D\) & \(V\) & \(K\) & \(R\) \\
\(R\) & \(V\) & \(I\) & \(H\) & \(H\) & \(L\) \\
\(S\) & \(L\) & \(L\) & \(Q\) & \(R\) & \(R\) & \(A\) & \(L\) & \(D\) & \(V\) & \(R\) & \(D\) & \(V\) & \(G\) & \(Y\) \\
\hline & \(Q\) & \(L\) & \(L\) & \(Q\) & \(Q\) & \(I\)
\end{tabular}






WA IS DAFGKHVAALES IG GYVGERAA DLIDDRDRAIAAA

 A TLL Q C GQ DLLA F A FEES LTT D E Y LLR S S R A D D A M L S A A ETQQAAALRASGNARIA ERADDI RDVALRVVV A A V A ATARTTAMFADDGGVMADRDTDD EDVVRDRVVAELD \(V F Q Q F K D T S D Q M L D S E D E Y F K Q R A E D I D D I G K E I I\)
 R T DA LAA Y R D IAC G P L E A S S S K Y L R E R A L D D I K D I C L Q L A S I C


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