

## QUERY

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UniRef90_R5T4V

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DLGTKNTNDTKFKSTKRGEVTVP ELEVDEEAVLDYVKGLAKTYNTAYKPKTLKTSYGPEVTV GVSIDTARAAGYVEELAAAYNTSNKAKNFKTSYGQTIQVK SVSVSESKAAEYVKNLASTCNTAYKPKTGKTSYGKTVTVT DVALDEAQ\|AEYVSELAKTYNTAYKPRAFKTSYGPTVNVS SVTLNRDMAGDYVKNLASRYNTAYKKRPFKTSYGQTVEVS QVSIDPDQAAAYVKSLASKYNTAYRKRSFATSYGQNVEVS QVEDDEEAVRAYVNGLAKKHDTYRRDRNFTTSNGDTILLK NVTLDEEKVKEYVKSLANTYNTVGKTRSFHTSSGNTLNVS NVTFNQEAVKEYIAALATKYNTKGKPRQFTTATGNTVTVE EVTFNEEAVKTYYSSLAEKYNTKGKPRQFTTATGNTVTVE NVTFNEEAVKAWLTEFGDKYDTVGTTRTIVTPTGKSAEVS TLDVDPALVREYVNALSRKYDTWGRKREFQTTNGETITI A NVMFDEGAVRAFVKALAEKYDTKGKTRNFTTATGNAVT: E
 SAVVDRSGVEAYVVNLAKKYNTAYCAKELKTSYGSTVTIT TFDLDEEKITEYVHQLGLKYDTFGLSRKFTTHDGQTITLK GQVINDEKITEYVAGLAQRHDTGGTNRTITATSGRTVTVG KAQISQEKVAEYVAYLADTYNTAGKSKSLKSSYGTDITVS QLVQDTQHVKDFVAQLASEHNTVGTTRSFNTTSGRTVSVY QVTFDPQQVWAFVKELADKYDTAYTPRTFHTSGGQDITV
 QLIMDDQHIADYVAQLAAAHDTVGTEREFQTTSGRTVSVY NLVVDEEGVLSFVKELASKYNTCYKPKELKTSYGSTVTIS

 KVSFDEEKVKSYINKLGNTYDTLGKPRDFKTTSGRTVKVS KVY LDSKSVSDYVKELASTYDTAYKAKNFTTSTGQNVKIT DPQLDEEAI EEFVAEQAKEYDTYGKKRKFTTVQGIUELTLP NVTFSEDAMRAYIDELCNQYNTVGKVRTDTTPTGKTAEVS QVVSDEEKVLAYVKQLAKKYNTVGTTRTFVSGRGDTVQVE QLLQNDEAVVDYVAQLAADHDTVGTERQFQTTSGRTVYVY QIGEKEKIKKYLHVLSNTYDTVGKDRNFSTSDGKMVKVS NVILDENLVRQYVSNLGLIVYDTMGQTRTFQTYDNREVE: K NVSVDDEALSAYVKAMAKNYNTAYGNRTLDTSYGQTVTIY DVTFDENKVRSYVDKLAGDYNTFGNTRNFVTATGKTVQVS NVTFNEEAVRAWMRDFGKTYDTVGTTRTDTSPTGKTVEVS NVTFTTDGISAYVRDLASRYDTVGKTRSFTTPTGKAATVS EVTVDENHARQYVESLARNYNTYSNTRDFTTSTNKKIQVS NVSLSKEKVDEFVDSSUKKYDTDFSNREFKTTYGKTVKVS EVEFDKDKПKKYMLELSKTYDTПGKTRSFVTTSGRTISVG NLMDDHSAI ASYVGQLASKYDTVGDERSFSTYDNREVTVS KVTFDEAAVREWLREFGKQYDTVGKTRSDTSPWGKTVEVS NVTRNEAAVREWMREFGKRYDTLGSSRTFTTPAGKTAEVS K AKLSRKKIEEYVAGLADTYNTAGKSKSLASSYGASVTVS EVKLNESKAKDYIDALSKTYNTVGMTRSFATSSGTTINIG NVVFNENGVREWMASFGDQYDTMGAARTПTTPWGKTAEVS SVVLNPEKVREFVNSMARQYDSFGKNRTITSHTGEEVTVT EVQLDENKVKEYINELSKTHSTVGKTRSFDTSSGTTVAVG AVTFNSDAVVKYVQQLESKYDTYQTKRTFTTGGGNSATVE RVTVDTEAVKEYVNGLARKYNTAYCTKELKTSYGPTVTMTM SVAIDEQQAKAFVKELAEKYDTAYTTRTFHTTGGRDI QIA ETKLDEAKDKSYFSDIAGKYNTVGKTRSFAASSGQTIKVS NVTFHEDKVRAYMOGLAKKYNTAYKAKELKTAYGPTVAIVT NATVSNEKVTAFVRQLAHDYNTIYAKRTFKTSYNKETTVE SAGVDSGKVSAYVKELADKYNTNHKSKTLKTSYGKTVTIK KVAVDEEAVKNYMNALSRNYDTYGGTRNFTSSSGTADAVS GVVFDDELKEKSYIN QLARATYNTVGKARQFTTPDGRATEVS NVVVSNQLVTEFVNSLAAKYNTVGKTRTFKTSLGNTATVS TLTLDEDAIKTYISDLANKYNTIYVPRTFHTSTGTDVTIE DVELINKTSVAKYVKELSKKYDTVGITRNFRSSVGKVVEVK SVSTDDAKVTKYVQQLASKYNTFGRKRSFKTSSGDTDEIG TVTLNEDAVREYVSALAEKYDTADRPREFKTNDGRTVTVS QVNADPAGVTGFVQALAAKYDTAGRERTFHTADGRDIPLT SVALDRDKISEYI KDLAFRHNTAYKKRSFQTSYGETVEVT NVSFKEKEVKAYIKKLASKYDTSGKPRSFVTATGKTVEVK DITFDNDAMVEYTRGLSKKYSTFGDSRPFKTATGKDITIS NVVFDNDAMKAWFTEFGDKYDTVGTTRNLTTPTGKATTVTT

## QUERY

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UniRef90_R5T4V8 2

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S A Y GWKT
GGDYGWRIDQEAETKHLLELLAAKQSAVCEPIYAQTAAVH

 GGNYGWLI DS DKESEYLDGAIMKGTVTTKEPAYAQVA


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 GGIVYGWLID K K K E A E A L VDVVVKA GKNV T R E P G GTY G WS DDED T E LVNN QNS K K N GEVVVTREPAYYTGGAA Y G $\square Y$ G WK TDDVDATVVKLGEY I LDA GE SVVTVEPE YSQR G Y

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| UniRef90-F7KGI8 | G |
| UniRef90_L7EKF3 | N |
| UniRef90_A5N5L0 |  |
| UniRef90_R6SIZ7 |  |
| UniRef90-R6W645 | G |
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| UniRef90-F0Z163 | A P |
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| UniRef90-R9NEV3 |  |
| UniRef90-G5IJU1 | G |
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| UniRef90-W1U710 |  |
| UniRef90-R5Z3G8 | G |
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| UniRef90-G5HL08 | G P |
| UniRef90-F3B8R4 | E |
| UniRef90-Q184F4 |  |
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| UniRef90-R5V490 |  |
| UniRef90-D4J5C2 | G |
| UniRef90_R5T4V8 | G |



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UniRet90-ATVBG9 UniRef90-UPIo00249104C UniRefoto-R5ULO1 UniRef90_R2PIZ7

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NVSUI DDAKVTQFVDELLAVKYNTYKTPRNFKTSLGTTVTIS DVVLDEEKAKEFVVEMAKKYDTFGYPRQFVTSSGETITVS EVQLDQEAVRNYLRTLSKRYDTVGDSRTFKTSSGKVI ELK MKVFDKDAVKKYI QSSASKYNTRGKTRTFKTATGNTVKVD NVSVSEEKIRSYLKSFAEKYNTDGKTRKFNTTAGSTISVS EVTFNEDKVKRYVNKTASDFNTFGNTRDFVTASNKTVQVS TVTDSREAVAEYVQNLAETYNTAYCAKKFVTTGGAVVTIN EISFDENKVRNYVYR』SSDFNTFGNTRNFVTTSKKTVQVS HVTLDEAAI RNWMTEFGRRYDTVGTTRPLTTPAGKATEVS EITLDEPKIKEYLNS LNNYNTVGKTRNFVTSLGATVQVS KPALDSEKVRQYVSELGEKYNTSTNDTKFKSTKRGEVTVP NPYDDKEKVRAYMDNLAYTYNTDGKTRDFVTATGEHIKVS QVAFDEKKVKKYVTKLGSTFNTFGKTRDFTTTSGSKVKVS DVA SEEDAMKYVRELSKKYDTVGDTRKFKTSGGKTVEIKK NI GI DQEAAKAYDQNLANTYNTDYVPRTFHTSYGNDVTIS KVTLDESKVGDYVEKLGSKYNTMGSSRPFTTAYGSKINVY DYIVNKDQVAAYVNSLGYKYDTFGCTRTFTTYDGRQKTIK NVI:NDQAVSNYVNGLANQYDTVGKTRDFKTSLGTDAKVS KWQFDREKIKKYVAQMAEKYDTVDTDREFVTTDGRKLTOH EVETDENKVKSYVKEMSNTYDTYEEERDFVTSVGKTVKVS KVSLDAAQVKAYI VSLNKQYATDNKDRQFKSTKRGTVTVP QVTVDEGKI SEYVKSLASKYNTAYTKRTFKTSYGPEVEVS KVSVSEEKI DDFVVMLRKKYDTDFRSREFQTSYGKTITI E EVIINEKSVKDYVLELSAKYNTVGDARNFKSSTGKMVEVK KMSFNKDDVKEYIKKLANKYDTKYKAKEFTTADGDTVKVE SLNIIDQEAVKSYVQNLAAKYNTMYVPRTFHTSYGNDVTVS KI VIDQEQAGAFISQLANKYNTIYVPRTFHTSMGTDVTVE ELVLDKEKTADYVKTLGAKYDTVGTERTFETYDNRQISVS QLLMDDQHIADYVAQLAATYNTVGTEREFHTTSGRTVYVY NVSIDEDKVESYVDKLGNTYDTVGRPRDFKTTSGRVVKVS GISSDKDAAADY SNMANKYNTDYVPRTFHTSLGTDVTVS NMSLDKDKVTAYVTSLGEKYNISSKPTEFNSTRRGKVSVP SVQVNQEKAAAYVKTLGDKYDTAGRGRNFRTTSGRDLSLS S D DMLDKDKVRAYVKAMGKKYDTVGVKRSFKTSLGTMVDI E DDPIDEEAI YNYVYALAGEYDTYGLPRTFESTNRGTMTI A KVLVKDGAISDYYASLADKYDTYDKPRKFKTSDGTYVTVE KVVLDSNKIETFVSKLGKKYNTYGKNRKFKTTKDGTVTVK DVA SKTEVMKYLKELSRKYNTVGLKRNFKTSVGKTIEVE
 KVSI NDDKVTAFVQHLASTYNTYGDVRNFKTSKGDTVKIG TVQVNQQKVAEYVKYLADKYDTYGKPHTFTSTSGRQVSVA NVSVSSSK NAFVKAFAKKYNTAYSYRKFRTADGRTVTTA DITINRDRMIELLRGLSKQYSTYGDPRKFKASSGKEITIY LVDVNYDKAAAFVKSMADQFDTAGKTRVFHTTTGKDLNLT HVTVDEAKAADYLYQLADRTNTAYGKHTFKTTGGNTITVN NYSLDQDKПKKYVKKLAEEVDTDGKERPFHTTSGDDVTVS TTILDQEKVVAFVAGLAGKYDTAGTARTFHTAGGRDVEIT NMVVHDEAI RAYVGELAGKYDTVGKNRSFHTSYGAVVNI S NTT DEDKVRSYVTSI GEQYNTSTNSSTFQSTKQGEVTVP GTTVDEAQVQSYVENLAGKYNTMYVPRSFQTTGGGVIEVS EITFNKDEIGKYIGKLGEDYNTADKTRNFSTSGGTKVKV S SVNISDEGVASFVKTI SNAYNTVGKPKTLKTSYGPTVTIS EIIFDQNKMQNYIEELDNNYNTFGKQRDFVTSDGTTVKVS EVVVDEKEAFEYVLGLSKKYDTVGRGRNLKTSTGKTLEVK SVIVDESKVVGYVQYLASKYNTYGDVRVFKTSLGDKVKIG KVTLNKEKVTDYVTALGNQYNTSSNPTTFKSTRRGDVTVP NYTVDKKKAMAYVEELAGKYDTYGKDRTFNSTSRGTIEQG K QQLDEASVKQYVSDLNTKYSTMGKTRDFKTTAGTEVKVP NLVVDQSKVQDYVKELNTKYATINKTRKFASTLSGVVDVQ NWTVDESKAADYVQQLAYKYDTFGLTHEFTTHAGKKITLK NYTVDEDKAMAYVEDLADKYDTYGKDREFKTTKRGTITIP
 NVT DEKEEKKYLNGUFPYNTAGKTRSFATSSGATVNVS NPSINEKKVKEYIDSLCEKYNTVGKERKFDSSTGKTVIVK KI SI DEAAAKAWVQQLAADYDT TYVPRTFRTSYGNDITVS KVNLDKDSVVNYVDKLAMECNTUGNTRNFKSSLGDTVKVS QLVFDEEAI YDYLGELNDQYATYNKSRQFNSTYDGPVTVQ NVSLNPDGLRQFVDRLAHELNTYGSKRPFHTQKGDDIEVS DISLNNEKITEYVNNLATLYNTSSNPTTFNSTRRGEVSVP DVKIDENAVKDYVLELSSKYNTVGMTRNFKTSTGKAVEVK EIHYDAERIASYVDSLADKYDTYGLDRKFHTTSGKTITV SVEVDRDAVTNWVNENLVKYDTYGSDRTFHSTLQGTLEI P SYAIDEAKVTEYVAGLAQKYDTVDSERSFTTTSGSTVTLT GNYVDEARVTEFVAWLAENYDTVGRDRTDTSTTGEPITVS TYTFDVNLVKPVVDGWSEKYNTYGKPRDFKTSGGGTVRLT KWKFKKKSVQAYVRQLAETYDTVGTTRTFQTYTGRYVEET KIS NQAKLVTYLKSLNSKYATUTKTRSFKSTKRGTVKVK




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## K K E

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KAADEANNLLKADFSLKLGDTPVQVNADAIGGWVRLDDV DQYKKI QAEDAVYDINGTKVTIPSAEIVSWLKVDTN QAA TDAANELDGTDVDLKMGGNVVTLDGSTFVQWMTFDEN KVDAMNKLSSVTIVTNILGNKESLTGEQLQEMVTVNAS AKDTDNKYMSSRITYNYAGQMQVLDGST KDWI NIDEN DLKKEDKKDEAMNIKFNFNGFDIGLKGDKLVEMLVQKGK A AQVKDQRIQNEKITYDVNGNTVVIPQATLKSWLKVKTD KARDNYNKVAGNEIVVEIGSKEEKLSGTELANMYDFNGQ KQAKSKMTKMGNVSGAIKIYDKSLKVNRQRVQSWDKENNG KA ${ }^{2} A Q L K E Y D N V K V V Y D F E K E K Y V A G T K D V S T M F D D E D Y$ QAAAEAANQLVKADMQLMMGGDVAEVNPALVSTWIISFDES A DK A A S YVASAVDLMDGDSAYQLDQDTI AS WIKEDEN KNQQKRLEEFLVQTVDYKVQKKVFTLTAGDLIKNASTKDD KQEEKKLKELTGKKITYTVQKTEYELTTADILTSARYQAG KAQFEKLSKDFKNKFVFDFEDRKYELTGQKLLEMYNVDKG AANTINKYLSANITYSYGGMVQVVDKYKVIDWISIENL QTQYTIYNTYLDNWI NWDMGDGTESI TPSE! KDWL H: KNG

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 K IT S L N Q D E V T A Y L T T K L N E E E Y N T K K N N P T Q F S S T R R G N V A V P
 $K V Q V D E E A I D Q Y L Y E W N V E N A G L N Q D H Q F Q S T E S G E V T V T$ QYQFD TAALD QEIA K I N K A Q S TLGKS FKFK THAGNTITTS $N V S F D Q D A M N S W T R D L A S S D D N T V G S E R S Y K T A N G D T I T V G S$
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 E E QE Y LK K LEFPEDT YKI Y GNTVKI K KQQU LK M YK QAEADANDQLEANFALKLADATVQVNADLISGWVRLDDV AKKKLLNQMNKAVVISYI A GKTYQLKATDLIDDVTYSNG QKQKAKLETLAKRTVVYKVQQTSYTLSGKNVI SQATY DGG AKDKLNALKKATLVNKI NGKTYVLKARDLLNNVTYQND QKQAQFLKTLLAQKATYKVQGKTYDIKAKDVITSASYQTG DAVQRANDLFPDSFSLMLNGKAATIDKATFAGWLSDEDY | $N K S$ | $L$ |
| :---: | :---: | KNALKKEANAYLDVTVTCNFEAATEAVGKDQIAQWLIVDND KEAKKKLANFYNAKTTYKVGGKTFTLEAKKLFKTVRYYGG K NKLKKVAAASVTYNVGGKTFNLSAKCDYLTVVSYYSG QNEKKQLQKLDGKKVSYKVEKQTYHLTTGDVITSATYKDG

 $K \| L Q Q A N A Y \square Q V E L K Y P D S K N E V V I P Q K V M L Q A L V T T N G$ KYFEKKEEVINEQI SQWVYIDDG
 A LD KANKMI GGEI ALTMNGTVSKDTKPMIVDWITTKDD KAKEKDNEIKDRQVKYTVNGKSFVFKRSEVFPTVTYESD

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 DLK GK A E N I V D A K VVVFEI L G K K Y I F S RKK Y Y P K I E C Y N R


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 $K Y N F D T S A V N G R I A K I N E K Q A T L G K A F N F R T H A G K E I$ T T S E I A T D T R A I TNNYVA TLAA KY DTNETARSFKTTNK GTITTA $T V S F D A T P L V S M V Q E K V N A M D T V G A T R T Y T R P D G K K F T V K$
 RII VD R K A V E K F V D K KY A Y F S T I G A T R T L K L A G G T I T V S K Y E Y D A A NLKK K I D D D N D S Q S T L D K N L K F K T T G G S E I T L D KAVLD NQAMRDWME KLCLKYKTLGGTRKFKSHTGKMMRLS QYQFDTTALDKLVKKVNKNQSTLDKSFTFTTHSGKQITAT K F S F N T E K L N K K I A A I N K A Q G T L N K N L K F H T T N G N N I T L E
 EATINVDAI RKWTQDL SK QLDDTVGSTTRTYSDPDGGKVVSVS $N$ I IV S E S A L Y E GVVQEL C GQY S TVGG G SR S F Y T S R G K T I T I I

 GVIPFDEATVVLA Y A N Y L E G K Y G N P G N T V S F H S A S G K D I A M L

 TAS I D NDAVVA WV S DFASSLLSTVGTTRTTFTRGDGESVVTAS $G \boxtimes \operatorname{V} L D E A A M T E W A S G L A D G M S T I G T E R T Y E R P D G K T V T V S$
 SP QLD K DVLAA WVDEATSGMNTVGTERTWTREDGKVCTVS

 K V K L S Q A K V E K WL E S F C L K Y K T Q G I A R T F K T H S G K K I K V
 NVTLNE QAI KDYAHDLSKQLDDSKGTARTYTRPDGKE ITTA



 SLLS I S Q D GV A S WV NEKA E GMNTVGA T RTWT REDGKVCTVVS
 S V S L D G E NMA T Y CT E LL A K K H D S KK K T G Q F K T T G G S II N V



 T L Q DD H DKV QE WVN GI S EKY S S K K M N MD F T T T S G SVVI S L N

 K Y V F S D T K I A N K $\square$ S N $\square$ N K EVV T LIH K S Y D F Q LP N G Q V T K V K


 AV H Y D D S K L T A K L N A M D K E V K T L G K S Y K F K T P A G S T I T V T
 N F S I IN N D E Glill K S F V E E L NYKFEDKKI R DFV D DL K E K F E VI G K D F D F T T H N G K S I K V K K DQ Y D V K K L T A K L N Q I D K E N T T L K K S Y K F K S V N G K T I T V K K Y R F D T S K L T E K L T Q I D K E V S T L H K S Y K F T V P K G K T I T V E



 Q G N F D Q D L L L S WV A ELER R EHS T I Y K S V D F T N I H GQ H L R Y K



 SFHFD DS L L K A R I E RL N Q E Y S T L H K K Y H F E T P E H G M L L V R Q GNFD QELLI DA WVA DLEREYS TIV QSVDF TNVH GQHLDRFK



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 KKEYAKINDILGQDFKYKVMGKTETTPVKDVLTEGTITEK ELDDRAEKLIAE PVLLTYGGRSWVLDPETLRAMLTVKNA EAKEKLKKMQKASVTYNDAGKKYTLKAEDLDGEVTYKDG

EKCVKLNNMLNTVI I IKID GSTYTIDKEVIVNWDTYDES
 QTTERDMNKLAGTNVSLQIQTKTVTVPQATVMSWIINDNG ETLVKA ISTYGYEDDLWTLDNHRFHALYYGQET $\square N N F L K N C \square N \square T \square S D G T V T L D A N T \prod K S W I G Q D E G$ Q D DEAQLIS WLEDDNN KKTVDQLNNTLTKKDTLSNGDKDFTI PKSAI ASWIVVNAD AVDLANQLISDPITVSYSSGNWNIDSTTLASWLRWEGN QKAKTTLEQLENSPIKLNFENKAWTVDTKQLLALLLDLQKG MTVSVK $\operatorname{G} G D G V E S F T R D D V A N W V S F D A T$ QKLVDELNKLLSKKIAFNNGDKDFTVPKTVLASWITVKAD

QKTVDQLNNLLSKK TTLDNGDKDFTDSKAVLASWDKDDAD KAVADRANALVALDVVI S DGDEEFTASAADKASWVSIDDG NARSQLEKLLASSPLKLHFKDQSWElPTSTLADWTSI D DD


K A LIE TAKK ILNKK LLNWENNKSEVLSETTDGWDGFENN DAMVKAISTYGYEDDMWTLLSNRFNALFYGHHF AANDANKRLTSSLVYNSKGKTFTLDADEDAKWIQVKKG


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[^0]UniRef90_FOTHB5 UniRef90_C2EPA UniRef90 U1ELK4 UniRef90-F3Y982 UniRef90-UPI0002491D14 UniRef90 Q03FP6 UniRef90 UPI000377E52D UniRef90-D1C444 UniRef90_FONX36 UniRef90 E1NVJ2
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A G MGEALDVDATVDAGLGLEDGE NESYGWGI
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[^0]:    lupas_21
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