>DP01392|P53330|#35-53 #36-53

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>DP01082|Q7X2A1|#1119-1165

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>DP00061|P27694|#102-180

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MMNATENQIFVETVSDQELEMLIGGADRGWIKTLTKDCPNVISSICAGTIITACKNCA >DP00824|Q9NJS1|#23-83

MANKLVLISLLCVVLVAKITQAAPQYAPGDEPSYDEDTDDSDKLVENDTSITDEDYAAIEASL SETFNTAADPGRRLGEGSKP

>DP01777|Q3LS93|#22-329

MEVKVTLIVAIVAALAISAHAQRDFNERRGKENDTERGQGGFGGRPGGMQMGGRRQDGGP MGEMRFDGPESGAPQMDGRRQNGGPMGGRRFDGPVFGGSRPDGAGGRPFFGQGGRRGDGE EETDAAQQIGDGLGGRGQFDGPGRRHHGRKPFGDRPFGRRNHTEGHQGHNETGDHPHDGH GRGHHGHRQGPPQDRPEEQPFGQRNESSDEDGRPHPRHHGRHHQHHHRNHTEGHQGHNET GDHPHRHHNKTGDGDQDRPMFEMRPFRFNPFGRKPFGDRPFGRRNGTEEGSARRDGQRRPY GNRGRWGENESEEEEHPTTESVTTSSPP

>DP00214|P10451|#1-314

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>DP00893|P08240|#40-47 #130-176

MLDFFTIFSKGGLVLWCFQGVSDSCTGPVNALIRSVLLQERGGNNSFTHEALTLKYKLDNQFE LVFVVGFQKILTLTYVDKLIDDVHRLFRDKYRTEIQQQSALSLLNGTFDFQNDFLRLLREAEE SSKIRAPTTMKKFEDSEKAKKPVRSMIETRGEKPKEKAKNSKKKGAKKEGSDGPLATSKPVP AEKSGLPVGPENGVELSKEELIRRKREEFIQKHGRGMEKSNKSTKSDAPKEKGKKAPRVWEL GGCANKEVLDYSTPTTNGTPEAALSEDINLIRGTGSGGQLQDLDCSSSDDEGAAQNSTKPSAT KGTLGGMFGMLKGLVGSKSLSREDMESVLDKMRDHLIAKNVAADIAVQLCESVANKLEGK VMGTFSTVTSTVKQALQESLVQILQPQRRVDMLRDIMDAQRRQRPYVVTFCGVNGVGKSTN LAKISFWLLENGFSVLIAACDTFRAGAVEQLRTHTRRLSALHPPEKHGGRTMVQLFEKGYGK DAAGIAMEAIAFARNQGFDVVLVDTAGRMQDNAPLMTALAKLITVNTPDLVLFVGEALVGN EAVDQLVKFNRALADHSMAQTPRLIDGIVLTKFDTIDDKVGAAISMTYITSKPIVFVGTGQTY CDLRSLNAKAVVAALMKA

>DP01393|P04880|#1-60

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>DP00564|Q6P8Z1|#2-169

MPLHVSLANGNRDLDYDSVQPYFMCDDEEEDVHHQQPPQPPAPSEDIWKKFELLPTPRPSPG HAGLYSPPCEAVAVSFAPRDHDGDSFSIADLPELPGGDAVKQSFVCDPDDETFVKNIILQDCM WNGFSASAKLVSKLDPYQAVRKEGTGVSLAADVEPATPPDCTCNT

>DP01934|Q9RJY2|#235-264

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>DP01367|Q7M3Y3|#97-182

SSLEERRAARAARRKQDENEGGEEQEETTSRRSRRRQQEDEEDSYSAPAEPAYDAEAENRR RQQQEEEAAARAAEEEYNRQQEELRRQRQEEERQRREEEQRRQQEEEERLRLEREEQEREE EARRMAEEQKKKKKKGLGGLSPEKKKMLKKLIMQKAAEDLANEAKAKAEAKEKYINDLVP KFSTDGKDVAALQALCKDFHKRLASLEEDVYDWEAKIRKQDFEINELTLKVNDTKGKFVKP VLRKVNKTESKLDKIQRKEAKKSDFRDNLKSSREHEADKEGGEGENE

>DP00490|O88900|#361-435

MTTSLQDGQSAAGRAGAQDSPLAVQVCRVAQGKGDAQDPAQVPGLHALSPASDATRRGAM DRRKAKDLEVQETPSIPNPFPELCCSPLTSVLSAGLFPRSNSRKKQVIKVYSEDETSRALEVPSD VTARDVCQLLILKNHYVDDNSWTLFEHLSHTGVERTVEDHELLTEVLSHWVMEEDNKLYLR KNYAKYEFFKNPMYFFPEHMVSFATEMNGDRSLTQIPQVFLSSNTYPEIHGFLHAKEQGKKS WKKAYFFLRRSGLYFSTKGTSKEPRHLQFFSEFSTSNVYMSLAGKKKHGAPTPYGFCFKPTK AGGPRDLKMLCAEEDQSRMCWVTAIRLLKYGMQLYQNYMHPSQARSACSSQSVSPMRSVS ENSLVAMDFSGQKTRVIDNPTEALSVAVEEGLAWRKKGCLRLGNHGSPTAPSQSSAVNMAL HRSQPWFHHRISRDEAQQLITRQGPVDGVFLVRDSQSNPRTFVLSMSHGQKIKHFQIIPVEDD GEVFHTLDDGHTKFTDLIQLVEFYQLNKGVLPCKLKHYCARMAV

>DP01550|J7FTI7|#93-162

>DP00928|P62552|#37-72

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>DP00025|P14738|#745-874

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>DP01084|Q1K7R9|#111-173

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GVLKEVQEVTQIVSKTTQKPYDKRELTLVDNTGYSVRCTIWGKTATNFDAQPESIVAFKGTK VSDFGGRSLSLLSSGTMAIDPDIPEAHHLKGWYDSSGRNNTFATHNNMQTLGGATGRKDDA KTISQVKEENLGTNEAPDYFALKATVVFIKQDNFAYPGCRSEGCNRKVTDMGDGTWRCEKC QINHDRPQYRYIMSVNVNDHTGQLWLSCFDDTARVIMGKSADELMEIRETDETRLPAEFEQA NCRKLNFRCRAKMDTFGEQQRIRYQVMSVAPLDYKMEGNKLNELINSYNQMSM >DP00018|P46527|#1-198

MSNVRVSNGSPSLERMDARQAEHPKPSACRNLFGPVDHEELTRDLEKHCRDMEEASQRKWN FDFQNHKPLEGKYEWQEVEKGSLPEFYYRPPRPPKGACKVPAQESQDVSGSRPAAPLIGAPA NSEDTHLVDPKTDPSDSQTGLAEQCAGIRKRPATDDSSTQNKRANRTEENVSDGSPNAGSVE OTPKKPGLRRROT

>DP00839|Q16186|#1-21 #132-252 #253-285 #386-407

MTTSGALFPSLVPGSRGASNKYLVEFRAGKMSLKGTTVTPDKRKGLVYIQQTDDSLIHFCWK DRTSGNVEDDLIIFPDDCEFKRVPQCPSGRVYVLKFKAGSKRLFFWMQEPKTDQDEEHCRKV NEYLNNPPMPGALGASGSSGHELSALGGEGGLQSLLGNMSHSQLMQLIGPAGLGGLGGLGA LTGPGLASLLGSSGPPGSSSSSSSSSQSAAVTPSSTTSSTRATPAPSAPAAASATSPSPAPSSGNG ASTAASPTQPIQLSDLQSILATMNVPAGPAGGQQVDLASVLTPEIMAPILANADVQERLLPYLP SGESLPQTADEIQNTLTSPQFQQALGMFSAALASGQLGPLMCQFGLPAEAVEAANKGDVEAF AKAMQNNAKPEQKEGDTKDKKDEEEDMSLD

>DP01940|Q8BH64|#1-18 #110-130

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>DP00007|P27695|#1-43

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>DP00230|Q14449|#361-435

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>DP00687|P08067|#81-92

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>DP01560|Q9UMR2|#55-91

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>DP00841|O14733|#30-100

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>DP00628|P15309|#248-286

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>DP00592|P48539|#1-62

 ${\tt MSERQGAGATNGKDKTSGENDGQKKVQEEFDIDMDAPETERAAVAIQSQFRKFQKKKAGSQSS}$

>DP00012|P13569|#708-831

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>DP00674|O69422|#2-155

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>DP01065|Q9NQI0|#1-236

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>DP00415|P0ABE0|#49-76

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>DP00894|Q7B2Z6|#1-12 #54-82

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>DP00942|Q647G9|#22-34 #57-71 #86-91 #106-112 #129-145

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>DP01104|P46531|#1758-1888

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>DP01457|O92973|#319-371

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>DP00672|Q92886|#90-150

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>DP00551|P16860|#1-77

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>DP01544|Q8WV28|#5-50

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>DP00482|Q08826|#1-29

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>DP00499|Q9Z2F5|#345-430

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>DP00077|P07248|#75-104 #155-161

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>DP00878|G8HXD9|#1-27 #28-56

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>DP01379|P0CU44|#1-224

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>DP01185|P46669|#95-111

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>DP01079|P40517|#1-203

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>DP00666|P32004|#1144-1257

MVVALRYVWPLLLCSPCLLIOIPEEYEGHHVMEPPVITEOSPRRLVVFPTDDISLKCEASGKPE VQFRWTRDGVHFKPKEELGVTVYQSPHSGSFTITGNNSNFAQRFQGIYRCFASNKLGTAMSH EIRLMAEGAPKWPKETVKPVEVEEGESVVLPCNPPPSAEPLRIYWMNSKILHIKQDERVTMG QNGNLYFANVLTSDNHSDYICHAHFPGTRTIIQKEPIDLRVKATNSMIDRKPRLLFPTNSSSHL VALQGQPLVLECIAEGFPTPTIKWLRPSGPMPADRVTYQNHNKTLQLLKVGEEDDGEYRCLA ENSLGSARHAYYVTVEAAPYWLHKPQSHLYGPGETARLDCQVQGRPQPEVTWRINGIPVEEL AKDQKYRIQRGALILSNVQPSDTMVTQCEARNRHGLLLANAYIYVVQLPAKILTADNQTYM AVQGSTAYLLCKAFGAPVPSVQWLDEDGTTVLQDERFFPYANGTLGIRDLQANDTGRYFCL AANDQNNVTIMANLKVKDATQITQGPRSTIEKKGSRVTFTCQASFDPSLQPSITWRGDGRDL QELGDSDKYFIEDGRLVIHSLDYSDQGNYSCVASTELDVVESRAQLLVVGSPGPVPRLVLSDL HLLTQSQVRVSWSPAEDHNAPIEKYDIEFEDKEMAPEKWYSLGKVPGNQTSTTLKLSPYVHY TFRVTAINKYGPGEPSPVSETVVTPEAAPEKNPVDVKGEGNETTNMVITWKPLRWMDWNAP QVQYRVQWRPQGTRGPWQEQIVSDPFLVVSNTSTFVPYEIKVQAVNSQGKGPEPQVTIGYSG EDYPQAIPELEGIEILNSSAVLVKWRPVDLAQVKGHLRGYNVTYWREGSQRKHSKRHIHKDH VVVPANTTSVILSGLRPYSSYHLEVQAFNGRGSGPASEFTFSTPEGVPGHPEALHLECQSNTSL LLRWQPPLSHNGVLTGYVLSYHPLDEGGKGQLSFNLRDPELRTHNLTDLSPHLRYRFQLQAT TKEGPGEAIVREGGTMALSGISDFGNISATAGENYSVVSWVPKEGQCNFRFHILFKALGEEKG GASLSPQYVSYNQSSYTQWDLQPDTDYEIHLFKERMFRHQMAVKTNGTGRVRLPPAGFATE GWFIGFVSAIILLLVLLILCFIKRSKGGKYSVKDKEDTQVDSEARPMKDETFGEYRSLESDNE EKAFGSSOPSLNGDIKPLGSDDSLADYGGSVDVOFNEDGSFIGOYSGKKEKEAAGGNDSSGA **TSPINPAVALE**

>DP00072|O8WZ42|#9880-12031

MTTQAPTFTQPLQSVVVLEGSTATFEAHISGFPVPEVSWFRDGQVISTSTLPGVQISFSDGRAK LTIPAVTKANSGRYSLKATNGSGQATSTAELLVKAETAPPNFVQRLQSMTVRQGSQVRLQVR VTGIPTPVVKFYRDGAEIQSSLDFQISQEGDLYSLLIAEAYPEDSGTYSVNATNSVGRATSTAE LLVQGEEEVPAKKTKTIVSTAQISESRQTRIEKKIEAHFDARSIATVEMVIDGAAGQQLPHKTP PRIPPKPKSRSPTPPSIAAKAQLARQQSPSPIRHSPSPVRHVRAPTPSPVRSVSPAARISTSPIRSV RSPLLMRKTQASTVATGPEVPPPWKQEGYVASSSEAEMRETTLTTSTQIRTEERWEGRYGVQ EQVTISGAAGAAASVSASASYAAEAVATGAKEVKQDADKSAAVATVVAAVDMARVREPVI SAVEQTAQRTTTTAVHIQPAQEQVRKEAEKTAVTKVVVAADKAKEQELKSRTKEVITTKQE QMHVTHEQIRKETEKTFVPKVVISAAKAKEQETRISEEITKKQKQVTQEAIRQETEITAASMV VVATAKSTKLETVPGAQEETTTQQDQMHLSYEKIMKETRKTVVPKVIVATPKVKEQDLVSR GREGITTKREQVQITQEKMRKEAEKTALSTIAVATAKAKEQETILRTRETMATRQEQIQVTHG KVDVGKKAEAVATVVAAVDQARVREPREPGHLEESYAQQTTLEYGYKERISAAKVAEPPQR PASEPHVVPKAVKPRVIOAPSETHIKTTDOKGMHISSOIKKTTDLTTERLVHVDKRPRTASPHF TVSKISVPKTEHGYEASIAGSAIATLQKELSATSSAQKITKSVKAPTVKPSETRVRAEPTPLPQF PFADTPDTYKSEAGVEVKKEVGVSITGTTVREERFEVLHGREAKVTETARVPAPVEIPVTPPT LVSGLKNVTVIEGESVTLECHISGYPSPTVTWYREDYQIESSIDFQITFQSGIARLMIREAFAED SGRFTCSAVNEAGTVSTSCYLAVOVSEEFEKETTAVTEKFTTEEKRFVESRDVVMTDTSLTEE QAGPGEPAAPYFITKPVVQKLVEGGSVVFGCQVGGNPKPHVYWKKSGVPLTTGYRYKVSYN KOTGECKLVISMTFADDAGEYTIVVRNKHGETSASASLLEEADYELLMKSOOEMLYOTOVT AFVQEPKVGETAPGFVYSEYEKEYEKEQALIRKKMAKDTVVVRTYVEDQEFHISSFEERLIKE IEYRIIKTTLEELLEEDGEEKMAVDISESEAVESGFDSRIKNYRILEGMGVTFHCKMSGYPLPKI

AWYKDGKRIKHGERYQMDFLQDGRASLRIPVVLPEDEGIYTAFASNIKGNAICSGKLYVEPA APLGAPTYIPTLEPVSRIRSLSPRSVSRSPIRMSPARMSPARMSPARMSPARMSPGRRLEETDES QLERLYKPVFVLKPVSFKCLEGQTARFDLKVVGRPMPETFWFHDGQQIVNDYTHKVVIKED GTQSLIIVPATPSDSGEWTVVAQNRAGRSSISVILTVEAVEHQVKPMFVEKLKNVNIKEGSRLE MKVRATGNPNPDIVWLKNSDIIVPHKYPKIRIEGTKGEAALKIDSTVSODSAWYTATAINKAG RDTTRCKVNVEVEFAEPEPERKLIIPRGTYRAKEIAAPELEPLHLRYGQEQWEEGDLYDKEKQ QKPFFKKKLTSLRLKRFGPAHFECRLTPIGDPTMVVEWLHDGKPLEAANRLRMINEFGYCSL DYGVAYSRDSGIITCRATNKYGTDHTSATLIVKDEKSLVEESQLPEGRKGLQRIEELERMAHE GALTGVTTDQKEKQKPDIVLYPEPVRVLEGETARFRCRVTGYPQPKVNWYLNGQLIRKSKRF RVRYDGIHYLDIVDCKSYDTGEVKVTAENPEGVIEHKVKLEIQQREDFRSVLRRAPEPRPEFH VHEPGKLQFEVQKVDRPVDTTETKEVVKLKRAERITHEKVPEESEELRSKFKRRTEEGYYEAI TAVELKSRKKDESYEELLRKTKDELLHWTKELTEEEKKALAEEGKITIPTFKPDKIELSPSMEA PKIFERIQSQTVGQGSDAHFRVRVVGKPDPECEWYKNGVKIERSDRIYWYWPEDNVCELVIR DVTAEDSASIMVKAINIAGETSSHAFLLVQAKQLITFTQELQDVVAKEKDTMATFECETSEPF VKVKWYKDGMEVHEGDKYRMHSDRKVHFLSILTIDTSDAEDYSCVLVEDENVKTTAKLIVE GAVVEFVKELQDIEVPESYSGELECIVSPENIEGKWYHNDVELKSNGKYTITSRRGRQNLTVK DVTKEDQGEYSFVIDGKKTTCKLKMKPRPIAILQGLSDQKVCEGDIVQLEVKVSLESVEGVW MKDGQEVQPSDRVHIVIDKQSHMLLIEDMTKEDAGNYSFTIPALGLSTSGRVSVYSVDVITPL KDVNVIEGTKAVLECKVSVPDVTSVKWYLNDEQIKPDDRVQAIVKGTKQRLVINRTHASDE GPYKLIVGRVETNCNLSVEKIKIIRGLRDLTCTETQNVVFEVELSHSGIDVLWNFKDKEIKPSS KYKIEAHGKIYKLTVLNMMKDDEGKYTFYAGENMTSGKLTVAGGAISKPLTDQTVAESQEA VFECEVANPDSKGEWLRDGKHLPLTNNIRSESDGHKRRLIIAATKLDDIGEYTYKVATSKTSA KLKVEAVKIKKTLKNLTVTETQDAVFTVELTHPNVKGVQWIKNGVVLESNEKYAISVKGTIY SLRIKNCAIVDESVYGFRLGRLGASARLHVETVKIIKKPKDVTALENATVAFEVSVSHDTVPV KWFHKSVEIKPSDKHRLVSERKVHKLMLQNISPSDAGEYTAVVGQLECKAKLFVETLHITKT MKNIEVPETKTASFECEVSHFNVPSMWLKNGVEIEMSEKFKIVVOGKLHOLIIMNTSTEDSAE YTFVCGNDQVSATLTVTPIMITSMLKDINAEEKDTITFEVTVNYEGISYKWLKNGVEIKSTDK COMRTKKLTHSLNIRNVHFGDAADYTFVAGKATSTATLYVEARHIEFRKHIKDIKVLEKKRA MFECEVSEPDITVQWMKDDQELQITDRIKIQKEKYVHRLLIPSTRMSDAGKYTVVAGGNVST AKLFVEGRDVRIRSIKKEVQVIEKQRAVVEFEVNEDDVDAHWYKDGIEINFQVQERHKYVVE RRIHRMFISETRQSDAGEYTFVAGRNRSSVTLYVNAPEPPQVLQELQPVTVQSGKPARFCAVI SGRPQPKISWYKEEQLLSTGFKCKFLHDGQEYTLLLIEAFPEDAAVYTCEAKNDYGVATTSAS LSVEVPEVVSPDQEMPVYPPAIITPLQDTVTSEGQPARFQCRVSGTDLKVSWYSKDKKIKPSR FFRMTQFEDTYQLEIAEAYPEDEGTYTFVASNAVGQVSSTANLSLEAPESILHERIEQEIEMEM KEFSSSFLSAEEEGLHSAELQLSKINETLELLSESPVYPTKFDSEKEGTGPIFIKEVSNADISMGD VATLSVTVIGIPKPKIQWFFNGVLLTPSADYKFVFDGDDHSLIILFTKLEDEGEYTCMASNDYG KTICSAYLKINSKGEGHKDTETESAVAKSLEKLGGPCPPHFLKELKPIRCAQGLPAIFEYTVVG EPAPTVTWFKENKQLCTSVYYTIIHNPNGSGTFIVNDPQREDSGLYICKAENMLGESTCAAEL LVLLEDTDMTDTPCKAKSTPEAPEDFPOTPLKGPAVEALDSEOEIATFVKDTILKAALITEENO QLSYEHIAKANELSSQLPLGAQELQSILEQDKLTPESTREFLCINGSIHFQPLKEPSPNLQLQIVQ SQKTFSKEGILMPEEPETQAVLSDTEKIFPSAMSIEQINSLTVEPLKTLLAEPEGNYPQSSIEPPM HSYLTSVAEEVLSPKEKTVSDTNREQRVTLQKQEAQSALILSQSLAEGHVESLQSPDVMISQV NYEPLVPSEHSCTEGGKILIESANPLENAGQDSAVRIEEGKSLRFPLALEEKQVLLKEEHSDNV VMPPDQIIESKREPVAIKKVQEVQGRDLLSKESLLSGIPEEQRLNLKIQICRALQAAVASEQPG LFSEWLRNIEKVEVEAVNITOEPRHIMCMYLVTSAKSVTEEVTIIIEDVDPOMANLKMELRDA LCAIIYEEIDILTAEGPRIQQGAKTSLQEEMDSFSGSQKVEPITEPEVESKYLISTEEVSYFNVQS RVKYLDATPVTKGVASAVVSDEKQDESLKPSEEKEESSSESGTEEVATVKIQEAEGGLIKEDG

PMIHTPLVDTVSEEGDIVHLTTSITNAKEVNWYFENKLVPSDEKFKCLQDQNTYTLVIDKVNT EDHQGEYVCEALNDSGKTATSAKLTVVKRAAPVIKRKIEPLEVALGHLAKFTCEIQSAPNVRF QWFKAGREIYESDKCSIRSSKYISSLEILRTQVVDCGEYTCKASNEYGSVSCTATLTVTEAYPP TFLSRPKSLTTFVGKAAKFICTVTGTPVIETIWQKDGAALSPSPNWRISDAENKHILELSNLTIQ DRGVYSCKASNKFGADICQAELIIIDKPHFIKELEPVQSAINKKVHLECQVDEDRKVTVTWSK DGQKLPPGKDYKICFEDKIATLEIPLAKLKDSGTYVCTASNEAGSSSCSATVTVREPPSFVKKV DPSYLMLPGESARLHCKLKGSPVIQVTWFKNNKELSESNTVRMYFVNSEAILDITDVKVEDS GSYSCEAVNDVGSDSCSTEIVIKEPPSFIKTLEPADIVRGTNALLQCEVSGTGPFEISWFKDKKQ IRSSKKYRLFSQKSLVCLEIFSFNSADVGEYECVVANEVGKCGCMATHLLKEPPTFVKKVDDL IALGGQTVTLQAAVRGSEPISVTWMKGQEVIREDGKIKMSFSNGVAVLIIPDVQISFGGKYTC LAENEAGSQTSVGELIVKEPAKIIERAELIQVTAGDPATLEYTVAGTPELKPKWYKDGRPLVA SKKYRISFKNNVAQLKFYSAELHDSGQYTFEISNEVGSSSCETTFTVLDRDIAPFFTKPLRNVD SVVNGTCRLDCKIAGSLPMRVSWFKDGKEIAASDRYRIAFVEGTASLEIIRVDMNDAGNFTCR ATNSVGSKDSSGALIVQEPPSFVTKPGSKDVLPGSAVCLKSTFQGSTPLTIRWFKGNKELVSG GSCYITKEALESSLELYLVKTSDSGTYTCKVSNVAGGVECSANLFVKEPATFVEKLEPSQLLK KGDATOLACKVTGTPPIKITWFANDREIKESSKHRMSFVESTAVLRLTDVGIEDSGEYMCEAO NEAGSDHCSSIVIVKESPYFTKEFKPIEVLKEYDVMLLAEVAGTPPFEITWFKDNTILRSGRKY KTFIODHLVSLOILKFVAADAGEYOCRVTNEVGSSICSARVTLREPPSFIKKIESTSSLRGGTAA FQATLKGSLPITVTWLKDSDEITEDDNIRMTFENNVASLYLSGIEVKHDGKYVCQAKNDAGIQ RCSALLSVKEPATITEEAVSIDVTOGDPATLOVKFSGTKEITAKWFKDGOELTLGSKYKISVTD TVSILKIISTEKKDSGEYTFEVQNDVGRSSCKARINVLDLIIPPSFTKKLKKMDSIKGSFIDLECI VAGSHPISIQWFKDDQEISASEKYKFSFHDNTAFLEISQLEGTDSGTYTCSATNKAGHNQCSG HLTVKEPPYFVEKPQSQDVNPNTRVQLKALVGGTAPMTIKWFKDNKELHSGAARSVWKDD TSTSLELFAAKATDSGTYICOLSNDVGTATSKATLFVKEPPOFIKKPSPVLVLRNGOSTTFECOI TGTPKIRVSWYLDGNEITAIQKHGISFIDGLATFQISGARVENSGTYVCEARNDAGTASCSIEL KVKEPPTFIRELKPVEVVKYSDVELECEVTGTPPFEVTWLKNNREIRSSKKYTLTDRVSVFNL HITKCDPSDTGEYQCIVSNEGGSCSCSTRVALKEPPSFIKKIENTTTVLKSSATFQSTVAGSPPIS ITWLKDDQILDEDDNVYISFVDSVATLQIRSVDNGHSGRYTCQAKNESGVERCYAFLLVQEP AQIVEKAKSVDVTEKDPMTLECVVAGTPELKVKWLKDGKQIVPSRYFSMSFENNVASFRIQS VMKQDSGQYTFKVENDFGSSSCDAYLRVLDQNIPPSFTKKLTKMDKVLGSSIHMECKVSGSL PISAQWFKDGKEISTSAKYRLVCHERSVSLEVNNLELEDTANYTCKVSNVAGDDACSGILTV KEPPSFLVKPGRQQAIPDSTVEFKAILKGTPPFKIKWFKDDVELVSGPKCFIGLEGSTSFLNLYS VDASKTGQYTCHVTNDVGSDSCTTMLLVTEPPKFVKKLEASKIVKAGDSSRLECKIAGSPEIR VVWFRNEHELPASDKYRMTFIDSVAVIQMNNLSTEDSGDFICEAQNPAGSTSCSTKVIVKEPP VFSSFPPIVETLKNAEVSLECELSGTPPFEVVWYKDKRQLRSSKKYKIASKNFHTSIHILNVDTS DIGEYHCKAQNEVGSDTCVCTVKLKEPPRFVSKLNSLTVVAGEPAELQASIEGAQPIFVQWLK EKEEVIRESENIRITFVENVATLQFAKAEPANAGKYICQIKNDGGMRENMATLMVLEPAVIVE KAGPMTVTVGETCTLECKVAGTPELSVEWYKDGKLLTSSQKHKFSFYNKISSLRILSVERQD AGTYTFOVONNVGKSSCTAVVDVSDRAVPPSFTRRLKNTGGVLGASCILECKVAGSSPISVA WFHEKTKIVSGAKYQTTFSDNVCTLQLNSLDSSDMGNYTCVAANVAGSDECRAVLTVQEPP SFVKEPEPLEVLPGKNVTFTSVIRGTPPFKVNWFRGARELVKGDRCNIYFEDTVAELELFNIDI SQSGEYTCVVSNNAGQASCTTRLFVKEPAAFLKRLSDHSVEPGKSIILESTYTGTLPISVTWKK DGFNITTSEKCNIVTTEKTCILEILNSTKRDAGOYSCEIENEAGRDVCGALVSTLEPPYFVTELE PLEAAVGDSVSLQCQVAGTPEITVSWYKGDTKLRPTPEYRTYFTNNVATLVFNKVNINDSGE YTCKAENSIGTASSKTVFRIOEROLPPSFAROLKDIEOTVGLPVTLTCRLNGSAPIOVCWYRDG VLLRDDENLQTSFVDNVATLKILQTDLSHSGQYSCSASNPLGTASSSARLTAREPKKSPFFDIK PVSIDVIAGESADFECHVTGAQPMRITWSKDNKEIRPGGNYTITCVGNTPHLRILKVGKGDSG

QYTCQATNDVGKDMCSAQLSVKEPPKFVKKLEASKVAKQGESIQLECKISGSPEIKVSWFRN DSELHESWKYNMSFINSVALLTINEASAEDSGDYICEAHNGVGDASCSTALTVKAPPVFTQKP SPVGALKGSDVILQCEISGTPPFEVVWVKDRKQVRNSKKFKITSKHFDTSLHILNLEASDVGE YHCKATNEVGSDTCSCSVKFKEPPRFVKKLSDTSTLIGDAVELRAIVEGFQPISVVWLKDRGE VIRESENTRISFIDNIATLOLGSPEASNSGKYICOIKNDAGMRECSAVLTVLEPARIIEKPEPMTV TTGNPFALECVVTGTPELSAKWFKDGRELSADSKHHITFINKVASLKIPCAEMSDKGLYSFEV KNSVGKSNCTVSVHVSDRIVPPSFIRKLKDVNAILGASVVLECRVSGSAPISVGWFQDGNEIVS GPKCQSSFSENVCTLNLSLLEPSDTGIYTCVAANVAGSDECSAVLTVQEPPSFEQTPDSVEVLP GMSLTFTSVIRGTPPFKVKWFKGSRELVPGESCNISLEDFVTELELFEVQPLESGDYSCLVTND AGSASCTTHLFVKEPATFVKRLADFSVETGSPIVLEATYTGTPPISVSWIKDEYLISQSERCSIT MTEKSTILEILESTIEDYAQYSCLIENEAGQDICEALVSVLEPPYFIEPLEHVEAVIGEPATLQCK VDGTPEIRISWYKEHTKLRSAPAYKMQFKNNVASLVINKVDHSDVGEYSCKADNSVGAVAS SAVLVIKARKLPPFFARKLKDVHETLGFPVAFECRINGSEPLQVSWYKDGVLLKDDANLQTSF VHNVATLQILQTDQSHIGQYNCSASNPLGTASSSAKLILSEHEVPPFFDLKPVSVDLALGESGT FKCHVTGTAPIKITWAKDNREIRPGGNYKMTLVENTATLTVLKVGKGDAGQYTCYASNIAG KDSCSAQLGVQEPPRFIKKLEPSRIVKQDEFTRYECKIGGSPEIKVLWYKDETEIQESSKFRMSF VDSVAVLEMHNLSVEDSGDYTCEAHNAAGSASSSTSLKVKEPPIFRKKPHPIETLKGADVHLE CELOGTPPFHVSWYKDKRELRSGKKYKIMSENFLTSIHILNVDAADIGEYOCKATNDVGSDT CVGSIALKAPPRFVKKLSDISTVVGKEVQLQTTIEGAEPISVVWFKDKGEIVRESDNIWISYSE NIATLOFSRVEPANAGKYTCOIKNDAGMOECFATLSVLEPATIVEKPESIKVTTGDTCTLECTV AGTPELSTKWFKDGKELTSDNKYKISFFNKVSGLKIINVAPSDSGVYSFEVQNPVGKDSCTAS LQVSDRTVPPSFTRKLKETNGLSGSSVVMECKVYGSPPISVSWFHEGNEISSGRKYQTTLTDN TCALTVNMLEESDSGDYTCIATNMAGSDECSAPLTVREPPSFVQKPDPMDVLTGTNVTFTSIV KGTPPFSVSWFKGSSELVPGDRCNVSLEDSVAELELFDVDTSOSGEYTCIVSNEAGKASCTTH LYIKAPAKFVKRLNDYSIEKGKPLILEGTFTGTPPISVTWKKNGINVTPSQRCNITTTEKSAILEI PSSTVEDAGOYNCYIENASGKDSCSAOILILEPPYFVKOLEPVKVSVGDSASLOCOLAGTPEIG VSWYKGDTKLRPTTTYKMHFRNNVATLVFNQVDINDSGEYICKAENSVGEVSASTFLTVQE QKLPPSFSRQLRDVQETVGLPVVFDCAISGSEPISVSWYKDGKPLKDSPNVQTSFLDNTATLNI FKTDRSLAGQYSCTATNPIGSASSSARLILTEGKNPPFFDIRLAPVDAVVGESADFECHVTGTQ PIKVSWAKDSREIRSGGKYQISYLENSAHLTVLKVDKGDSGQYTCYAVNEVGKDSCTAQLNI KERLIPPSFTKRLSETVEETEGNSFKLEGRVAGSQPITVAWYKNNIEIQPTSNCEITFKNNTLVL QVRKAGMNDAGLYTCKVSNDAGSALCTSSIVIKEPKKPPVFDQHLTPVTVSEGEYVQLSCHV QGSEPIRIQWLKAGREIKPSDRCSFSFASGTAVLELRDVAKADSGDYVCKASNVAGSDTTKSK VTIKDKPAVAPATKKAAVDGRLFFVSEPQSIRVVEKTTATFIAKVGGDPIPNVKWTKGKWRQ LNQGGRVFIHQKGDEAKLEIRDTTKTDSGLYRCVAFNEHGEIESNVNLQVDERKKQEKIEGD LRAMLKKTPILKKGAGEEEEIDIMELLKNVDPKEYEKYARMYGITDFRGLLQAFELLKQSQEE ETHRLEIEEIERSERDEKEFEELVSFIQQRLSQTEPVTLIKDIENQTVLKDNDAVFEIDIKINYPEI KLSWYKGTEKLEPSDKFEISIDGDRHTLRVKNCQLKDQGNYRLVCGPHIASAKLTVIEPAWE RHLODVTLKEGOTCTMTCOFSVPNVKSEWFRNGRILKPOGRHKTEVEHKVHKLTIADVRAE DOGOYTCKYEDLETSAELRIEAEPIOFTKRIONIVVSEHOSATFECEVSFDDAIVTWYKGPTEL TESQKYNFRNDGRCHYMTIHNVTPDDEGVYSVIARLEPRGEARSTAELYLTTKEIKLELKPPD IPDSRVPIPTMPIRAVPPEEIPPVVAPPIPLLLPTPEEKKPPPKRIEVTKKAVKKDAKKVVAKPKE MTPREEIVKKPPPPTTLIPAKAPEIIDVSSKAEEVKIMTITRKKEVOKEKEAVYEKKOAVHKEK RVFIESFEEPYDELEVEPYTEPFEQPYYEEPDEDYEEIKVEAKKEVHEEWEEDFEEGQEYYERE EGYDEGEEEWEEAYOEREVIOVOKEVYEESHERKVPAKVPEKKAPPPPKVIKKPVIEKIEKTS RRMEEEKVQVTKVPEVSKKIVPQKPSRTPVQEEVIEVKVPAVHTKKMVISEEKMFFASHTEEE VSVTVPEVQKEIVTEEKIHVAISKRVEPPPKVPELPEKPAPEEVAPVPIPKKVEPPAPKVPEVPK

KPVPEEKKPVPVPKKEPAAPPKVPEVPKKPVPEEKIPVPVAKKKEAPPAKVPEVOKGVVTEEK ITIVTQREESPPPAVPEIPKKKVPEERKPVPRKEEEVPPPPKVPALPKKPVPEEKVAVPVPVAKK APPPRAEVSKKTVVEEKRFVAEEKLSFAVPQRVEVTRHEVSAEEEWSYSEEEEGVSISVYREE EREEEEAEVTEYEVMEEPEEYVVEEKLHIISKRVEAEPAEVTERQEKKIVLKPKIPAKIEEPPP AKVPEAPKKIVPEKKVPAPVPKKEKVPPPKVPEEPKKPVPEKKVPPKVIKMEEPLPAKVTERH MQITQEEKVLVAVTKKEAPPKARVPEEPKRAVPEEKVLKLKPKREEEPPAKVTEFRKRVVKE EKVSIEAPKREPQPIKEVTIMEEKERAYTLEEEAVSVQREEEYEEYEEYDYKEFEEYEPTEEYD QYEEYEEREYERYEEHEEYITEPEKPIPVKPVPEEPVPTKPKAPPAKVLKKAVPEEKVPVPIPK KLKPPPPKVPEEPKKVFEEKIRISITKREKEQVTEPAAKVPMKPKRVVAEEKVPVPRKEVAPPV RVPEVPKELEPEEVAFEEEVVTHVEEYLVEEEEEYIHEEEEFITEEEVVPVIPVKVPEVPRKPVP EEKKPVPVPKKKEAPPAKVPEVPKKPEEKVPVLIPKKEKPPPAKVPEVPKKPVPEEKVPVPVP KKVEAPPAKVPEVPKKPVPEKKVPVPAPKKVEAPPAKVPEVPKKLIPEEKKPTPVPKKVEAPP PKVPKKREPVPVPVALPQEEEVLFEEEIVPEEEVLPEEEEVLPEEEEVLPEEEEVLPEEEIPPEE EEVPPEEEYVPEEEFVPEEEVLPEVKPKVPVPAPVPEIKKKVTEKKVVIPKKEEAPPAKVPEV PKKVEEKRIILPKEEEVLPVEVTEEPEEEPISEEEIPEEPPSIEEVEEVAPPRVPEVIKKAVPEAPTP VPKKVEAPPAKVSKKIPEEKVPVPVOKKEAPPAKVPEVPKKVPEKKVLVPKKEAVPPAKGRT VLEEKVSVAFRQEVVVKERLELEVVEAEVEEIPEEEEFHEVEEYFEEGEFHEVEEFIKLEQHRV EEEHRVEKVHRVIEVFEAEEVEVFEKPKAPPKGPEISEKIIPPKKPPTKVVPRKEPPAKVPEVPK KIVVEEKVRVPEEPRVPPTKVPEVLPPKEVVPEKKVPVPPAKKPEAPPPKVPEAPKEVVPEKK VPVPPPKKPEVPPTKVPEVPKAAVPEKKVPEAIPPKPESPPPEVPEAPKEVVPEKKVPAAPPKK PEVTPVKVPEAPKEVVPEKKVPVPPPKKPEVPPTKVPEVPKVAVPEKKVPEAIPPKPESPPPEV FEEPEEVALEEPPAEVVEEPEPAAPPOVTVPPKKPVPEKKAPAVVAKKPELPPVKVPEVPKEV VPEKKVPLVVPKKPEAPPAKVPEVPKEVVPEKKVAVPKKPEVPPAKVPEVPKKPVLEEKPAV PVPERAESPPPEVYEEPEEIAPEEEIAPEEEKPVPVAEEEEPEVPPPAVPEEPKKIIPEKKVPVIKK PEAPPPKEPEPEKVIEKPKLKPRPPPPPPAPPKEDVKEKIFQLKAIPKKKVPEKPQVPEKVELTPL KVPGGEKKVRKLLPERKPEPKEEVVLKSVLRKRPEEEEPKVEPKKLEKVKKPAVPEPPPPKPV EEVEVPTVTKRERKIPEPTKVPEIKPAIPLPAPEPKPKPEAEVKTIKPPPVEPEPTPIAAPVTVPV VGKKAEAKAPKEEAAKPKGPIKGVPKKTPSPIEAERRKLRPGSGGEKPPDEAPFTYQLKAVPL KFVKEIKDIILTESEFVGSSAIFECLVSPSTAITTWMKDGSNIRESPKHRFIADGKDRKLHIIDVQ LSDAGEYTCVLRLGNKEKTSTAKLVVEELPVRFVKTLEEEVTVVKGQPLYLSCELNKERDVV WRKDGKIVVEKPGRIVPGVIGLMRALTINDADDTDAGTYTVTVENANNLECSSCVKVVEVIR DWLVKPIRDQHVKPKGTAIFACDIAKDTPNIKWFKGYDEIPAEPNDKTEILRDGNHLYLKIKN AMPEDIAEYAVEIEGKRYPAKLTLGEREVELLKPIEDVTIYEKESASFDAEISEADIPGQWKLK GELLRPSPTCEIKAEGGKRFLTLHKVKLDQAGEVLYQALNAITTAILTVKEIELDFAVPLKDVT VPERRQARFECVLTREANVIWSKGPDIIKSSDKFDIIADGKKHILVINDSQFDDEGVYTAEVEG KKTSARLFVTGIRLKFMSPLEDQTVKEGETATFVCELSHEKMHVVWFKNDAKLHTSRTVLIS SEGKTHKLEMKEVTLDDISQIKAQVKELSSTAQLKVLEADPYFTVKLHDKTAVEKDEITLKCE VSKDVPVKWFKDGEEIVPSPKYSIKADGLRRILKIKKADLKDKGEYVCDCGTDKTKANVTVE ARLIKVEKPLYGVEVFVGETAHFEIELSEPDVHGOWKLKGOPLTASPDCEIIEDGKKHILILHN CQLGMTGEVSFQAANAKSAANLKVKELPLIFITPLSDVKVFEKDEAKFECEVSREPKTFRWLK GTQEITGDDRFELIKDGTKHSMVIKSAAFEDEAKYMFEAEDKHTSGKLIIEGIRLKFLTPLKDV TAKEKESAVFTVELSHDNIRVKWFKNDQRLHTTRSVSMQDEGKTHSITFKDLSIDDTSQIRVE AMGMSSEAKLTVLEGDPYFTGKLODYTGVEKDEVILOCEISKADAPVKWFKDGKEIKPSKN AVIKADGKKRMLILKKALKSDIGQYTCDCGTDKTSGKLDIEDREIKLVRPLHSVEVMETETAR FETEISEDDIHANWKLKGEALLOTPDCEIKEEGKIHSLVLHNCRLDOTGGVDFOAANVKSSAH LRVKPRVIGLLRPLKDVTVTAGETATFDCELSYEDIPVEWYLKGKKLEPSDKVVPRSEGKVH TLTLRDVKLEDAGEVQLTAKDFKTHANLFVKEPPVEFTKPLEDQTVEEGATAVLECEVSREN

AKVKWFKNGTEILKSKKYEIVADGRVRKLVIHDCTPEDIKTYTCDAKDFKTSCNLNVVPPHV EFLRPLTDLQVREKEMARFECELSRENAKVKWFKDGAEIKKGKKYDIISKGAVRILVINKCLL DDEAEYSCEVRTARTSGMLTVLEEEAVFTKNLANIEVSETDTIKLVCEVSKPGAEVIWYKGD EEIIETGRYEILTEGRKRILVIQNAHLEDAGNYNCRLPSSRTDGKVKVHELAAEFISKPQNLEIL EGEKAEFVCSISKESFPVQWKRDDKTLESGDKYDVIADGKKRVLVVKDATLQDMGTYVVM VGAARAAHLTVIEKLRIVVPLKDTRVKEQQEVVFNCEVNTEGAKAKWFRNEEAIFDSSKYII LQKDLVYTLRIRDAHLDDQANYNVSLTNHRGENVKSAANLIVEEEDLRIVEPLKDIETMEKK SVTFWCKVNRLNVTLKWTKNGEEVPFDNRVSYRVDKYKHMLTIKDCGFPDEGEYIVTAGQD KSVAELLIIEAPTEFVEHLEDOTVTEFDDAVFSCQLSREKANVKWYRNGREIKEGKKYKFEKD GSIHRLIIKDCRLDDECEYACGVEDRKSRARLFVEEIPVEIIRPPQDILEAPGADVVFLAELNKD KVEVQWLRNNMVVVQGDKHQMMSEGKIHRLQICDIKPRDQGEYRFIAKDKEARAKLELAA APKIKTADQDLVVDVGKPLTMVVPYDAYPKAEAEWFKENEPLSTKTIDTTAEQTSFRILEAK KGDKGRYKIVLQNKHGKAEGFINLKVIDVPGPVRNLEVTETFDGEVSLAWEEPLTDGGSKIIG YVVERRDIKRKTWVLATDRAESCEFTVTGLQKGGVEYLFRVSARNRVGTGEPVETDNPVEA RSKYDVPGPPLNVTITDVNRFGVSLTWEPPEYDGGAEITNYVIELRDKTSIRWDTAMTVRAED LSATVTDVVEGQEYSFRVRAQNRIGVGKPSAATPFVKVADPIERPSPPVNLTSSDQTQSSVQL KWEPPLKDGGSPILGYIIERCEEGKDNWIRCNMKLVPELTYKVTGLEKGNKYLYRVSAENKA GVSDPSEILGPLTADDAFVEPTMDLSAFKDGLEVIVPNPITILVPSTGYPRPTATWCFGDKVLE TGDRVKMKTLSAYAELVISPSERSDKGIYTLKLENRVKTISGEIDVNVIARPSAPKELKFGDIT KDSVHLTWEPPDDDGGSPLTGYVVEKREVSRKTWTKVMDFVTDLEFTVPDLVOGKEYLFKV CARNKCGPGEPAYVDEPVNMSTPATVPDPPENVKWRDRTANSIFLTWDPPKNDGGSRIKGYI VERCPRGSDKWVACGEPVAETKMEVTGLEEGKWYAYRVKALNRQGASKPSRPTEEIQAVD TQEAPEIFLDVKLLAGLTVKAGTKIELPATVTGKPEPKITWTKADMILKQDKRITIENVPKKST VTIVDSKRSDTGTYIIEAVNVCGRATAVVEVNVLDKPGPPAAFDITDVTNESCLLTWNPPRDD GGSKITNYVVERRATDSEVWHKLSSTVKDTNFKATKLIPNKEYIFRVAAENMYGVGEPVQAS PITAKYOFDPPGPPTRLEPSDITKDAVTLTWCEPDDDGGSPITGYWVERLDPDTDKWVRCNK MPVKDTTYRVKGLTNKKKYRFRVLAENLAGPGKPSKSTEPILIKDPIDPPWPPGKPTVKDVG KTSVRLNWTKPEHDGGAKIESYVIEMLKTGTDEWVRVAEGVPTTQHLLPGLMEGQEYSFRV RAVNKAGESEPSEPSDPVLCREKLYPPSPPRWLEVINITKNTADLKWTVPEKDGGSPITNYIVE KRDVRRKGWOTVDTTVKDTKCTVTPLTEGSLYVFRVAAENAIGOSDYTEIEDSVLAKDTFTT PGPPYALAVVDVTKRHVDLKWEPPKNDGGRPIQRYVIEKKERLGTRWVKAGKTAGPDCNFR VTDVIEGTEVQFQVRAENEAGVGHPSEPTEILSIEDPTSPPSPPLDLHVTDAGRKHIAIAWKPPE KNGGSPIIGYHVEMCPVGTEKWMRVNSRPIKDLKFKVEEGVVPDKEYVLRVRAVNAIGVSEP SEISENVVAKDPDCKPTIDLETHDIIVIEGEKLSIPVPFRAVPVPTVSWHKDGKEVKASDRLTM KNDHISAHLEVPKSVRADAGIYTITLENKLGSATASINVKVIGLPGPCKDIKASDITKSSCKLT WEPPEFDGGTPILHYVLERREAGRRTYIPVMSGENKLSWTVKDLIPNGEYFFRVKAVNKVGG GEYIELKNPVIAQDPKQPPDPPVDVEVHNPTAEAMTITWKPPLYDGGSKIMGYIIEKIAKGEER WKRCNEHLVPILTYTAKGLEEGKEYQFRVRAENAAGISEPSRATPPTKAVDPIDAPKVILRTSL EVKRGDEIALDASISGSPYPTITWIKDENVIVPEEIKKRAAPLVRRRKGEVOEEEPFVLPLTORL SIDNSKKGESQLRVRDSLRPDHGLYMIKVENDHGIAKAPCTVSVLDTPGPPINFVFEDIRKTSV LCKWEPPLDDGGSEIINYTLEKKDKTKPDSEWIVVTSTLRHCKYSVTKLIEGKEYLFRVRAEN RFGPGPPCVSKPLVAKDPFGPPDAPDKPIVEDVTSNSMLVKWNEPKDNGSPILGYWLEKREV NSTHWSRVNKSLLNALKANVDGLLEGLTYVFRVCAENAAGPGKFSPPSDPKTAHDPISPPGPP IPRVTDTSSTTIELEWEPPAFNGGGEIVGYFVDKQLVGTNEWSRCTEKMIKVRQYTVKEIREG ADYKLRVSAVNAAGEGPPGETOPVTVAEPOEPPAVELDVSVKGGIOIMAGKTLRIPAVVTGR PVPTKVWTKEEGELDKDRVVIDNVGTKSELIIKDALRKDHGRYVITATNSCGSKFAAARVEV FDVPGPVLDLKPVVTNRKMCLLNWSDPEDDGGSEITGFIIERKDAKMHTWRQPIETERSKCDI

TGLLEGQEYKFRVIAKNKFGCGPPVEIGPILAVDPLGPPTSPERLTYTERTKSTITLDWKEPRSN GGSPIQGYIIEKRRHDKPDFERVNKRLCPTTSFLVENLDEHQMYEFRVKAVNEIGESEPSLPLN VVIQDDEVPPTIKLRLSVRGDTIKVKAGEPVHIPADVTGLPMPKIEWSKNETVIEKPTDALQIT KEEVSRSEAKTELSIPKAVREDKGTYTVTASNRLGSVFRNVHVEVYDRPSPPRNLAVTDIKAE SCYLTWDAPLDNGGSEITHYVIDKRDASRKKAEWEEVTNTAVEKRYGIWKLIPNGOYEFRVR AVNKYGISDECKSDKVVIQDPYRLPGPPGKPKVLARTKGSMLVSWTPPLDNGGSPITGYWLE KREEGSPYWSRVSRAPITKVGLKGVEFNVPRLLEGVKYQFRAMAINAAGIGPPSEPSDPEVAG DPIFPPGPPSCPEVKDKTKSSISLGWKPPAKDGGSPIKGYIVEMQEEGTTDWKRVNEPDKLITT CECVVPNLKELRKYRFRVKAVNEAGESEPSDTTGEIPATDIQEEPEVFIDIGAQDCLVCKAGSQ IRIPAVIKGRPTPKSSWEFDGKAKKAMKDGVHDIPEDAQLETAENSSVIIIPECKRSHTGKYSIT AKNKAGQKTANCRVKVMDVPGPPKDLKVSDITRGSCRLSWKMPDDDGGDRIKGYVIEKRTI DGKAWTKVNPDCGSTTFVVPDLLSEQQYFFRVRAENRFGIGPPVETIQRTTARDPIYPPDPPIK LKIGLITKNTVHLSWKPPKNDGGSPVTHYIVECLAWDPTGTKKEAWRQCNKRDVEELQFTVE DLVEGGEYEFRVKAVNAAGVSKPSATVGPVTVKDOTCPPSIDLKEFMEVEEGTNVNIVAKIK GVPFPTLTWFKAPPKKPDNKEPVLYDTHVNKLVVDDTCTLVIPQSRRSDTGLYTITAVNNLG TASKEMRLNVLGRPGPPVGPIKFESVSADQMTLSWFPPKDDGGSKITNYVIEKREANRKTWV HVSSEPKECTYTIPKLLEGHEYVFRIMAQNKYGIGEPLDSEPETARNLFSVPGAPDKPTVSSVT RNSMTVNWEEPEYDGGSPVTGYWLEMKDTTSKRWKRVNRDPIKAMTLGVSYKVTGLIEGS DYQFRVYAINAAGVGPASLPSDPATARDPIAPPGPPFPKVTDWTKSSADLEWSPPLKDGGSKV TGYIVEYKEEGKEEWEKGKDKEVRGTKLVVTGLKEGAFYKFRVRAVNIAGIGEPGEVTDVIE MKDRLVSPDLQLDASVRDRIVVHAGGVIRIIAYVSGKPPPTVTWNMNERTLPQEATIETTAISS SMVIKNCORSHQGVYSLLAKNEAGERKKTIIVDVLDVPGPVGTPFLAHNLTNESCKLTWFSPE DDGGSPITNYVIEKRESDRRAWTPVTYTVTRQNATVQGLIQGKAYFFRIAAENSIGMGPFVET SEALVIREPITVPERPEDLEVKEVTKNTVTLTWNPPKYDGGSEIINYVLESRLIGTEKFHKVTN DNLLSRKYTVKGLKEGDTYEYRVSAVNIVGQGKPSFCTKPITCKDELAPPTLHLDFRDKLTIR VGEAFALTGRYSGKPKPKVSWFKDEADVLEDDRTHIKTTPATLALEKIKAKRSDSGKYCVVV ENSTGSRKGFCQVNVVDRPGPPVGPVSFDEVTKDYMVISWKPPLDDGGSKITNYIIEKKEVGK DVWMPVTSASAKTTCKVSKLLEGKDYIFRIHAENLYGISDPLVSDSMKAKDRFRVPDAPDQPI VTEVTKDSALVTWNKPHDGGKPITNYILEKRETMSKRWARVTKDPIHPYTKFRVPDLLEGCQ YEFRVSAENEIGIGDPSPPSKPVFAKDPIAKPSPPVNPEAIDTTCNSVDLTWQPPRHDGGSKILG YIVEYQKVGDEEWRRANHTPESCPETKYKVTGLRDGQTYKFRVLAVNAAGESDPAHVPEPV LVKDRLEPPELILDANMAREQHIKVGDTLRLSAIIKGVPFPKVTWKKEDRDAPTKARIDVTPV GSKLEIRNAAHEDGGIYSLTVENPAGSKTVSVKVLVLDKPGPPRDLEVSEIRKDSCYLTWKEP LDDGGSVITNYVVERRDVASAQWSPLSATSKKKSHFAKHLNEGNQYLFRVAAENQYGRGPF VETPKPIKALDPLHPPGPPKDLHHVDVDKTEVSLVWNKPDRDGGSPITGYLVEYQEEGTQDW IKFKTVTNLECVVTGLQQGKTYRFRVKAENIVGLGLPDTTIPIECQEKLVPPSVELDVKLIEGL VVKAGTTVRFPAIIRGVPVPTAKWTTDGSEIKTDEHYTVETDNFSSVLTIKNCLRRDTGEYOIT VSNAAGSKTVAVHLTVLDVPGPPTGPINILDVTPEHMTISWQPPKDDGGSPVINYIVEKQDTR KDTWGVVSSGSSKTKLKIPHLOKGCEYVFRVRAENKIGVGPPLDSTPTVAKHKFSPPSPPGKP VVTDITENAATVSWTLPKSDGGSPITGYYMERREVTGKWVRVNKTPIADLKFRVTGLYEGNT YEFRVFAENLAGLSKPSPSSDPIKACRPIKPPGPPINPKLKDKSRETADLVWTKPLSDGGSPILG YVVECQKPGTAQWNRINKDELIRQCAFRVPGLIEGNEYRFRIKAANIVGEGEPRELAESVIAK DILHPPEVELDVTCRDVITVRVGOTIRILARVKGRPEPDITWTKEGKVLVREKRVDLIODLPRV ELQIKEAVRADHGKYIISAKNSSGHAQGSAIVNVLDRPGPCQNLKVTNVTKENCTISWENPLD NGGSEITNFIVEYRKPNOKGWSIVASDVTKRLIKANLLANNEYYFRVCAENKVGVGPTIETKT PILAINPIDRPGEPENLHIADKGKTFVYLKWRRPDYDGGSPNLSYHVERRLKGSDDWERVHK GSIKETHYMVDRCVENQIYEFRVQTKNEGGESDWVKTEEVVVKEDLQKPVLDLKLSGVLTV

KAGDTIRLEAGVRGKPFPEVAWTKDKDATDLTRSPRVKIDTRADSSKFSLTKAKRSDGGKYV VTATNTAGSFVAYATVNVLDKPGPVRNLKIVDVSSDRCTVCWDPPEDDGGCEIQNYILEKCE TKRMVWSTYSATVLTPGTTVTRLIEGNEYIFRVRAENKIGTGPPTESKPVIAKTKYDKPGRPD PPEVTKVSKEEMTVVWNPPEYDGGKSITGYFLEKKEKHSTRWVPVNKSAIPERRMKVONLLP DHEYOFRVKAENEIGIGEPSLPSRPVVAKDPIEPPGPPTNFRVVDTTKHSITLGWGKPVYDGG APIIGYVVEMRPKIADASPDEGWKRCNAAAQLVRKEFTVTSLDENQEYEFRVCAQNQVGIGR PAELKEAIKPKEILEPPEIDLDASMRKLVIVRAGCPIRLFAIVRGRPAPKVTWRKVGIDNVVRK GQVDLVDTMAFLVIPNSTRDDSGKYSLTLVNPAGEKAVFVNVRVLDTPGPVSDLKVSDVTK TSCHVSWAPPENDGGSQVTHYIVEKREADRKTWSTVTPEVKKTSFHVTNLVPGNEYYFRVT AVNEYGPGVPTDVPKPVLASDPLSEPDPPRKLEVTEMTKNSATLAWLPPLRDGGAKIDGYITS YREEEQPADRWTEYSVVKDLSLVVTGLKEGKKYKFRVAARNAVGVSLPREAEGVYEAKEQ LLPPKILMPEQITIKAGKKLRIEAHVYGKPHPTCKWKKGEDEVVTSSHLAVHKADSSSILIIKD VTRKDSGYYSLTAENSSGTDTQKIKVVVMDAPGPPQPPFDISDIDADACSLSWHIPLEDGGSNI TNYIVEKCDVSRGDWVTALASVTKTSCRVGKLIPGQEYIFRVRAENRFGISEPLTSPKMVAQF PFGVPSEPKNARVTKVNKDCIFVAWDRPDSDGGSPIIGYLIERKERNSLLWVKANDTLVRSTE YPCAGLVEGLEYSFRIYALNKAGSSPPSKPTEYVTARMPVDPPGKPEVIDVTKSTVSLIWARP KHDGGSKIIGYFVEACKLPGDKWVRCNTAPHQIPQEEYTATGLEEKAQYQFRAIARTAVNISP PSEPSDPVTILAENVPPRIDLSVAMKSLLTVKAGTNVCLDATVFGKPMPTVSWKKDGTLLKP AEGIKMAMQRNLCTLELFSVNRKDSGDYTITAENSSGSKSATIKLKVLDKPGPPASVKINKMY SDRAMLSWEPPLEDGGSEITNYIVDKRETSRPNWAOVSATVPITSCSVEKLIEGHEYOFRICAE NKYGVGDPVFTEPAIAKNPYDPPGRCDPPVISNITKDHMTVSWKPPADDGGSPITGYLLEKRE TQAVNWTKVNRKPIIERTLKATGLQEGTEYEFRVTAINKAGPGKPSDASKAAYARDPQYPPG PPAFPKVYDTTRSSVSLSWGKPAYDGGSPIIGYLVEVKRADSDNWVRCNLPQNLQKTRFEVT GLMEDTOYOFRVYAVNKIGYSDPSDVPDKHYPKDILIPPEGELDADLRKTLILRAGVTMRLY VPVKGRPPPKITWSKPNVNLRDRIGLDIKSTDFDTFLRCENVNKYDAGKYILTLENSCGKKEY TIVVKVLDTPGPPVNVTVKEISKDSAYVTWEPPIIDGGSPIINYVVOKRDAERKSWSTVTTECS KTSFRVANLEEGKSYFFRVFAENEYGIGDPGETRDAVKASQTPGPVVDLKVRSVSKSSCSIGW KKPHSDGGSRIIGYVVDFLTEENKWQRVMKSLSLQYSAKDLTEGKEYTFRVSAENENGEGTP SEITVVARDDVVAPDLDLKGLPDLCYLAKENSNFRLKIPIKGKPAPSVSWKKGEDPLATDTRV SVESSAVNTTLIVYDCQKSDAGKYTITLKNVAGTKEGTISIKVVGKPGIPTGPIKFDEVTAEAM TLKWAPPKDDGGSEITNYILEKRDSVNNKWVTCASAVQKTTFRVTRLHEGMEYTFRVSAEN KYGVGEGLKSEPIVARHPFDVPDAPPPPNIVDVRHDSVSLTWTDPKKTGGSPITGYHLEFKER NSLLWKRANKTPIRMRDFKVTGLTEGLEYEFRVMAINLAGVGKPSLPSEPVVALDPIDPPGKP EVINITRNSVTLIWTEPKYDGGHKLTGYIVEKRDLPSKSWMKANHVNVPECAFTVTDLVEGG KYEFRIRAKNTAGAISAPSESTETIICKDEYEAPTIVLDPTIKDGLTIKAGDTIVLNAISILGKPLP KSSWSKAGKDIRPSDITQITSTPTSSMLTIKYATRKDAGEYTITATNPFGTKVEHVKVTVLDVP GPPGPVEISNVSAEKATLTWTPPLEDGGSPIKSYILEKRETSRLLWTVVSEDIQSCRHVATKLIQ GNEYIFRVSAVNHYGKGEPVQSEPVKMVDRFGPPGPPEKPEVSNVTKNTATVSWKRPVDDG GSEITGYHVERREKKSLRWVRAIKTPVSDLRCKVTGLOEGSTYEFRVSAENRAGIGPPSEASD SVLMKDAAYPPGPPSNPHVTDTTKKSASLAWGKPHYDGGLEITGYVVEHQKVGDEAWIKDT TGTALRITQFVVPDLQTKEKYNFRISAINDAGVGEPAVIPDVEIVEREMAPDFELDAELRRTLV VRAGLSIRIFVPIKGRPAPEVTWTKDNINLKNRANIENTESFTLLIIPECNRYDTGKFVMTIENP AGKKSGFVNVRVLDTPGPVLNLRPTDITKDSVTLHWDLPLIDGGSRITNYIVEKREATRKSYS TATTKCHKCTYKVTGLSEGCEYFFRVMAENEYGIGEPTETTEPVKASEAPSPPDSLNIMDITKS TVSLAWPKPKHDGGSKITGYVIEAORKGSDOWTHITTVKGLECVVRNLTEGEEYTFOVMAV NSAGRSAPRESRPVIVKEQTMLPELDLRGIYQKLVIAKAGDNIKVEIPVLGRPKPTVTWKKGD QILKQTQRVNFETTATSTILNINECVRSDSGPYPLTARNIVGEVGDVITIQVHDIPGPPTGPIKFD

EVSSDFVTFSWDPPENDGGVPISNYVVEMROTDSTTWVELATTVIRTTYKATRLTTGLEYOF RVKAQNRYGVGPGITSACIVANYPFKVPGPPGTPQVTAVTKDSMTISWHEPLSDGGSPILGYH VERKERNGILWQTVSKALVPGNIFKSSGLTDGIAYEFRVIAENMAGKSKPSKPSEPMLALDPI DPPGKPVPLNITRHTVTLKWAKPEYTGGFKITSYIVEKRDLPNGRWLKANFSNILENEFTVSG LTEDAAYEFRVIAKNAAGAISPPSEPSDAITCRDDVEAPKIKVDVKFKDTVILKAGEAFRLEAD VSGRPPPTMEWSKDGKELEGTAKLEIKIADFSTNLVNKDSTRRDSGAYTLTATNPGGFAKHIF NVKVLDRPGPPEGPLAVTEVTSEKCVLSWFPPLDDGGAKIDHYIVQKRETSRLAWTNVASEV OVTKLKVTKLLKGNEYIFRVMAVNKYGVGEPLESEPVLAVNPYGPPDPPKNPEVTTITKDSM VVCWGHPDSDGGSEIINYIVERRDKAGQRWIKCNKKTLTDLRYKVSGLTEGHEYEFRIMAEN AAGISAPSPTSPFYKACDTVFKPGPPGNPRVLDTSRSSISIAWNKPIYDGGSEITGYMVEIALPE EDEWQIVTPPAGLKATSYTITGLTENQEYKIRIYAMNSEGLGEPALVPGTPKAEDRMLPPEIEL DADLRKVVTIRACCTLRLFVPIKGRPAPEVKWARDHGESLDKASIESTSSYTLLIVGNVNRFD SGKYILTVENSSGSKSAFVNVRVLDTPGPPQDLKVKEVTKTSVTLTWDPPLLDGGSKIKNYIV EKRESTRKAYSTVATNCHKTSWKVDQLQEGCSYYFRVLAENEYGIGLPAETAESVKASERPL PPGKITLMDVTRNSVSLSWEKPEHDGGSRILGYIVEMQTKGSDKWATCATVKVTEATITGLIQ GEEYSFRVSAQNEKGISDPRQLSVPVIAKDLVIPPAFKLLFNTFTVLAGEDLKVDVPFIGRPTPA VTWHKDNVPLKQTTRVNAESTENNSLLTIKDACREDVGHYVVKLTNSAGEAIETLNVIVLDK PGPPTGPVKMDEVTADSITLSWGPPKYDGGSSINNYIVEKRDTSTTTWQIVSATVARTTIKAC RLKTGCEYQFRIAAENRYGKSTYLNSEPTVAQYPFKVPGPPGTPVVTLSSRDSMEVQWNEPIS DGGSRVIGYHLERKERNSILWVKLNKTPIPQTKFKTTGLEEGVEYEFRVSAENIVGIGKPSKVS ECYVARDPCDPPGRPEAIIVTRNSVTLQWKKPTYDGGSKITGYIVEKKELPEGRWMKASFTNI IDTHFEVTGLVEDHRYEFRVIARNAAGVFSEPSESTGAITARDEVDPPRISMDPKYKDTIVVHA GESFKVDADIYGKPIPTIQWIKGDQELSNTARLEIKSTDFATSLSVKDAVRVDSGNYILKAKNV AGERSVTVNVKVLDRPGPPEGPVVISGVTAEKCTLAWKPPLODGGSDIINYIVERRETSRLVW TVVDANVQTLSCKVTKLLEGNEYTFRIMAVNKYGVGEPLESEPVVAKNPFVVPDAPKAPEVT TVTKDSMIVVWERPASDGGSEILGYVLEKRDKEGIRWTRCHKRLIGELRLRVTGLIENHDYEF RVSAENAAGLSEPSPPSAYQKACDPIYKPGPPNNPKVIDITRSSVFLSWSKPIYDGGCEIQGYIV EKCDVSVGEWTMCTPPTGINKTNIEVEKLLEKHEYNFRICAINKAGVGEHADVPGPIIVEEKL EAPDIDLDLELRKIINIRAGGSLRLFVPIKGRPTPEVKWGKVDGEIRDAAIIDVTSSFTSLVLDN VNRYDSGKYTLTLENSSGTKSAFVTVRVLDTPSPPVNLKVTEITKDSVSITWEPPLLDGGSKIK NYIVEKREATRKSYAAVVTNCHKNSWKIDQLQEGCSYYFRVTAENEYGIGLPAQTADPIKVA EVPQPPGKITVDDVTRNSVSLSWTKPEHDGGSKIIQYIVEMQAKHSEKWSECARVKSLQAVIT NLTOGEEYLFRVVAVNEKGRSDPRSLAVPIVAKDLVIEPDVKPAFSSYSVOVGODLKIEVPISG RPKPTITWTKDGLPLKQTTRINVTDSLDLTTLSIKETHKDDGGQYGITVANVVGQKTASIEIVT LDKPDPPKGPVKFDDVSAESITLSWNPPLYTGGCQITNYIVQKRDTTTTVWDVVSATVARTTL KVTKLKTGTEYQFRIFAENRYGQSFALESDPIVAQYPYKEPGPPGTPFATAISKDSMVIQWHEP VNNGGSPVIGYHLERKERNSILWTKVNKTIIHDTQFKAQNLEEGIEYEFRVYAENIVGVGKAS KNSECYVARDPCDPPGTPEPIMVKRNEITLQWTKPVYDGGSMITGYIVEKRDLPDGRWMKAS FTNVIETOFTVSGLTEDORYEFRVIAKNAAGAISKPSDSTGPITAKDEVELPRISMDPKFRDTIV VNAGETFRLEADVHGKPLPTIEWLRGDKEIEESARCEIKNTDFKALLIVKDAIRIDGGQYILRA SNVAGSKSFPVNVKVLDRPGPPEGPVQVTGVTSEKCSLTWSPPLQDGGSDISHYVVEKRETSR LAWTVVASEVVTNSLKVTKLLEGNEYVFRIMAVNKYGVGEPLESAPVLMKNPFVLPGPPKSL EVTNIAKDSMTVCWNRPDSDGGSEIIGYIVEKRDRSGIRWIKCNKRRITDLRLRVTGLTEDHE YEFRVSAENAAGVGEPSPATVYYKACDPVFKPGPPTNAHIVDTTKNSITLAWGKPIYDGGSEI LGYVVEICKADEEEWOIVTPOTGLRVTRFEISKLTEHOEYKIRVCALNKVGLGEATSVPGTVK PEDKLEAPELDLDSELRKGIVVRAGGSARIHIPFKGRPTPEITWSREEGEFTDKVQIEKGVNYT QLSIDNCDRNDAGKYILKLENSSGSKSAFVTVKVLDTPGPPQNLAVKEVRKDSAFLVWEPPII

DGGAKVKNYVIDKRESTRKAYANVSSKCSKTSFKVENLTEGAIYYFRVMAENEFGVGVPVE TVDAVKAAEPPSPPGKVTLTDVSQTSASLMWEKPEHDGGSRVLGYVVEMQPKGTEKWSIVA ESKVCNAVVTGLSSGQEYQFRVKAYNEKGKSDPRVLGVPVIAKDLTIQPSLKLPFNTYSIQAG EDLKIEIPVIGRPRPNISWVKDGEPLKQTTRVNVEETATSTVLHIKEGNKDDFGKYTVTATNSA GTATENLSVIVLEKPGPPVGPVRFDEVSADFVVISWEPPAYTGGCOISNYIVEKRDTTTTTWH MVSATVARTTIKITKLKTGTEYQFRIFAENRYGKSAPLDSKAVIVQYPFKEPGPPGTPFVTSISK DQMLVQWHEPVNDGGTKIIGYHLEQKEKNSILWVKLNKTPIQDTKFKTTGLDEGLEYEFKVS AENIVGIGKPSKVSECFVARDPCDPPGRPEAIVITRNNVTLKWKKPAYDGGSKITGYIVEKKD LPDGRWMKASFTNVLETEFTVSGLVEDQRYEFRVIARNAAGNFSEPSDSSGAITARDEIDAPN ASLDPKYKDVIVVHAGETFVLEADIRGKPIPDVVWSKDGKELEETAARMEIKSTIQKTTLVVK DCIRTDGGQYILKLSNVGGTKSIPITVKVLDRPGPPEGPLKVTGVTAEKCYLAWNPPLQDGGA NISHYIIEKRETSRLSWTQVSTEVQALNYKVTKLLPGNEYIFRVMAVNKYGIGEPLESGPVTA CNPYKPPGPPSTPEVSAITKDSMVVTWARPVDDGGTEIEGYILEKRDKEGVRWTKCNKKTLT DLRLRVTGLTEGHSYEFRVAAENAAGVGEPSEPSVFYRACDALYPPGPPSNPKVTDTSRSSVS LAWSKPIYDGGAPVKGYVVEVKEAAADEWTTCTPPTGLQGKQFTVTKLKENTEYNFRICAIN SEGVGEPATLPGSVVAQERIEPPEIELDADLRKVVVLRASATLRLFVTIKGRPEPEVKWEKAE GILTDRAQIEVTSSFTMLVIDNVTRFDSGRYNLTLENNSGSKTAFVNVRVLDSPSAPVNLTIRE VKKDSVTLSWEPPLIDGGAKITNYIVEKRETTRKAYATITNNCTKTTFRIENLOEGCSYYFRVL ASNEYGIGLPAETTEPVKVSEPPLPPGRVTLVDVTRNTATIKWEKPESDGGSKITGYVVEMQT KGSEKWSTCTOVKTLEATISGLTAGEEYVFRVAAVNEKGRSDPROLGVPVIARDIEIKPSVEL PFHTFNVKAREQLKIDVPFKGRPQATVNWRKDGQTLKETTRVNVSSSKTVTSLSIKEASKED VGTYELCVSNSAGSITVPITIIVLDRPGPPGPIRIDEVSCDSITISWNPPEYDGGCQISNYIVEKKE TTSTTWHIVSQAVARTSIKIVRLTTGSEYQFRVCAENRYGKSSYSESSAVVAEYPFSPPGPPGT PKVVHATKSTMLVTWOVPVNDGGSRVIGYHLEYKERSSILWSKANKILIADTOMKVSGLDE GLMYEYRVYAENIAGIGKCSKSCEPVPARDPCDPPGQPEVTNITRKSVSLKWSKPHYDGGAKI TGYIVERRELPDGRWLKCNYTNIOETYFEVTELTEDORYEFRVFARNAADSVSEPSESTGPIIV KDDVEPPRVMMDVKFRDVIVVKAGEVLKINADIAGRPLPVISWAKDGIEIEERARTEIISTDNH TLLTVKDCIRRDTGQYVLTLKNVAGTRSVAVNCKVLDKPGPPAGPLEINGLTAEKCSLSWGR PQEDGGADIDYYIVEKRETSHLAWTICEGELQMTSCKVTKLLKGNEYIFRVTGVNKYGVGEP LESVAIKALDPFTVPSPPTSLEITSVTKESMTLCWSRPESDGGSEISGYIIERREKNSLRWVRVN KKPVYDLRVKSTGLREGCEYEYRVYAENAAGLSLPSETSPLIRAEDPVFLPSPPSKPKIVDSGK TTITIAWVKPLFDGGAPITGYTVEYKKSDDTDWKTSIQSLRGTEYTISGLTTGAEYVFRVKSV NKVGASDPSDSSDPQIAKEREEEPLFDIDSEMRKTLIVKAGASFTMTVPFRGRPVPNVLWSKP DTDLRTRAYVDTTDSRTSLTIENANRNDSGKYTLTIQNVLSAASLTLVVKVLDTPGPPTNITV QDVTKESAVLSWDVPENDGGAPVKNYHIEKREASKKAWVSVTNNCNRLSYKVTNLQEGAI YYFRVSGENEFGVGIPAETKEGVKITEKPSPPEKLGVTSISKDSVSLTWLKPEHDGGSRIVHYV VEALEKGOKNWVKCAVAKSTHHVVSGLRENSEYFFRVFAENOAGLSDPRELLLPVLIKEOLE PPEIDMKNFPSHTVYVRAGSNLKVDIPISGKPLPKVTLSRDGVPLKATMRFNTEITAENLTINL KESVTADAGRYEITAANSSGTTKAFINIVVLDRPGPPTGPVVISDITEESVTLKWEPPKYDGGS QVTNYILLKRETSTAVWTEVSATVARTMMKVMKLTTGEEYQFRIKAENRFGISDHIDSACVT VKLPYTTPGPPSTPWVTNVTRESITVGWHEPVSNGGSAVVGYHLEMKDRNSILWQKANKLVI RTTHFKVTTISAGLIYEFRVYAENAAGVGKPSHPSEPVLAIDACEPPRNVRITDISKNSVSLSW OOPAFDGGSKITGYIVERRDLPDGRWTKASFTNVTETOFIISGLTONSOYEFRVFARNAVGSIS NPSEVVGPITCIDSYGGPVIDLPLEYTEVVKYRAGTSVKLRAGISGKPAPTIEWYKDDKELQTN ALVCVENTTDLASILIKDADRLNSGCYELKLRNAMGSASATIRVOILDKPGPPGGPIEFKTVTA EKITLLWRPPADDGGAKITHYIVEKRETSRVVWSMVSEHLEECIITTTKIIKGNEYIFRVRAVN KYGIGEPLESDSVVAKNAFVTPGPPGIPEVTKITKNSMTVVWSRPIADGGSDISGYFLEKRDKK

SLGWFKVLKETIRDTRQKVTGLTENSDYQYRVCAVNAAGQGPFSEPSEFYKAADPIDPPGPP AKIRIADSTKSSITLGWSKPVYDGGSAVTGYVVEIRQGEEEEWTTVSTKGEVRTTEYVVSNLK PGVNYYFRVSAVNCAGQGEPIEMNEPVQAKDILEAPEIDLDVALRTSVIAKAGEDVQVLIPFK GRPPPTVTWRKDEKNLGSDARYSIENTDSSSLLTIPQVTRNDTGKYILTIENGVGEPKSSTVSV KVLDTPAACOKLOVKHVSRGTVTLLWDPPLIDGGSPIINYVIEKRDATKRTWSVVSHKCSSTS FKLIDLSEKTPFFFRVLAENEIGIGEPCETTEPVKAAEVPAPIRDLSMKDSTKTSVILSWTKPDF DGGSVITEYVVERKGKGEQTWSHAGISKTCEIEVSQLKEQSVLEFRVFAKNEKGLSDPVTIGPI TVKELIITPEVDLSDIPGAQVTVRIGHNVHLELPYKGKPKPSISWLKDGLPLKESEFVRFSKTEN KITLSIKNAKKEHGGKYTVILDNAVCRIAVPITVITLGPPSKPKGPIRFDEIKADSVILSWDVPE DNGGGEITCYSIEKRETSQTNWKMVCSSVARTTFKVPNLVKDAEYQFRVRAENRYGVSQPL VSSIIVAKHQFRIPGPPGKPVIYNVTSDGMSLTWDAPVYDGGSEVTGFHVEKKERNSILWQKV NTSPISGREYRATGLVEGLDYQFRVYAENSAGLSSPSDPSKFTLAVSPVDPPGTPDYIDVTRET ITLKWNPPLRDGGSKIVGYSIEKRQGNERWVRCNFTDVSECQYTVTGLSPGDRYEFRIIARNA VGTISPPSQSSGIIMTRDENVPPIVEFGPEYFDGLIIKSGESLRIKALVQGRPVPRVTWFKDGVEI EKRMNMEITDVLGSTSLFVRDATRDHRGVYTVEAKNASGSAKAEIKVKVQDTPGKVVGPIRF TNITGEKMTLWWDAPLNDGCAPITHYIIEKRETSRLAWALIEDKCEAQSYTAIKLINGNEYQF RVSAVNKFGVGRPLDSDPVVAQIQYTVPDAPGIPEPSNITGNSITLTWARPESDGGSEIQQYILE RREKKSTRWVKVISKRPISETRFKVTGLTEGNEYEFHVMAENAAGVGPASGISRLIKCREPVN PPGPPTVVKVTDTSKTTVSLEWSKPVFDGGMEIIGYIIEMCKADLGDWHKVNAEACVKTRYT VTDLOAGEEYKFRVSAINGAGKGDSCEVTGTIKAVDRLTAPELDIDANFKOTHVVRAGASIR LFIAYQGRPTPTAVWSKPDSNLSLRADIHTTDSFSTLTVENCNRNDAGKYTLTVENNSGSKSIT FTVKVLDTPGPPGPITFKDVTRGSATLMWDAPLLDGGARIHHYVVEKREASRRSWOVISEKC TRQIFKVNDLAEGVPYYFRVSAVNEYGVGEPYEMPEPIVATEQPAPPRRLDVVDTSKSSAVL AWLKPDHDGGSRITGYLLEMROKGSDFWVEAGHTKOLTFTVERLVEKTEYEFRVKAKNDA GYSEPREAFSSVIIKEPQIEPTADLTGITNQLITCKAGSPFTIDVPISGRPAPKVTWKLEEMRLKE TDRVSITTKDRTTLTVKDSMRGDSGRYFLTLENTAGVKTFSVTVVVIGRPGPVTGPIEVSSVS AESCVLSWGEPKDGGGTEITNYIVEKRESGTTAWQLVNSSVKRTQIKVTHLTKYMEYSFRVS SENRFGVSKPLESAPIIAEHPFVPPSAPTRPEVYHVSANAMSIRWEEPYHDGGSKIIGYWVEKK ERNTILWVKENKVPCLECNYKVTGLVEGLEYQFRTYALNAAGVSKASEASRPIMAQNPVDA PGRPEVTDVTRSTVSLIWSAPAYDGGSKVVGYIIERKPVSEVGDGRWLKCNYTIVSDNFFTVT ALSEGDTYEFRVLAKNAAGVISKGSESTGPVTCRDEYAPPKAELDARLHGDLVTIRAGSDLV LDAAVGGKPEPKIIWTKGDKELDLCEKVSLQYTGKRATAVIKFCDRSDSGKYTLTVKNASGT KAVSVMVKVLDSPGPCGKLTVSRVTQEKCTLAWSLPQEDGGAEITHYIVERRETSRLNWVIV EGECPTLSYVVTRLIKNNEYIFRVRAVNKYGPGVPVESEPIVARNSFTIPSPPGIPEEVGTGKEH IIIQWTKPESDGGNEISNYLVDKREKKSLRWTRVNKDYVVYDTRLKVTSLMEGCDYQFRVTA VNAAGNSEPSEASNFISCREPSYTPGPPSAPRVVDTTKHSISLAWTKPMYDGGTDIVGYVLEM OEKDTDOWYRVHTNATIRNTEFTVPDLKMGOKYSFRVAAVNVKGMSEYSESIAEIEPVERIEI PDLELADDLKKTVTIRAGASLRLMVSVSGRPPPVITWSKQGIDLASRAIIDTTESYSLLIVDKV NRYDAGKYTIEAENOSGKKSATVLVKVYDTPGPCPSVKVKEVSRDSVTITWEIPTIDGGAPVN NYIVEKREAAMRAFKTVTTKCSKTLYRISGLVEGTMYYFRVLPENIYGIGEPCETSDAVLVSE VPLVPAKLEVVDVTKSTVTLAWEKPLYDGGSRLTGYVLEACKAGTERWMKVVTLKPTVLE HTVTSLNEGEQYLFRIRAQNEKGVSEPRETVTAVTVQDLRVLPTIDLSTMPQKTIHVPAGRPV ELVIPIAGRPPPAASWFFAGSKLRESERVTVETHTKVAKLTIRETTIRDTGEYTLELKNVTGTTS ETIKVIILDKPGPPTGPIKIDEIDATSITISWEPPELDGGAPLSGYVVEQRDAHRPGWLPVSESVT RSTFKFTRLTEGNEYVFRVAATNRFGIGSYLOSEVIECRSSIRIPGPPETLOIFDVSRDGMTLTW YPPEDDGGSQVTGYIVERKEVRADRWVRVNKVPVTMTRYRSTGLTEGLEYEHRVTAINARG SGKPSRPSKPIVAMDPIAPPGKPONPRVTDTTRTSVSLAWSVPEDEGGSKVTGYLIEMQKVDQ

HEWTKCNTTPTKIREYTLTHLPQGAEYRFRVLACNAGGPGEPAEVPGTVKVTEMLEYPDYEL DERYQEGIFVRQGGVIRLTIPIKGKPFPICKWTKEGQDISKRAMIATSETHTELVIKEADRGDSG TYDLVLENKCGKKAVYIKVRVIGSPNSPEGPLEYDDIQVRSVRVSWRPPADDGGADILGYILE RREVPKAAWYTIDSRVRGTSLVVKGLKENVEYHFRVSAENQFGISKPLKSEEPVTPKTPLNPP EPPSNPPEVLDVTKSSVSLSWSRPKDDGGSRVTGYYIERKETSTDKWVRHNKT0ITTTMYTV TGLVPDAEYQFRIIAQNDVGLSETSPASEPVVCKDPFDKPSQPGELEILSISKDSVTLQWEKPEC DGGKEILGYWVEYROSGDSAWKKSNKERIKDKOFTIGGLLEATEYEFRVFAENETGLSRPRR TAMSIKTKLTSGEAPGIRKEMKDVTTKLGEAAQLSCQIVGRPLPDIKWYRFGKELIQSRKYKM SSDGRTHTLTVMTEEQEDEGVYTCIATNEVGEVETSSKLLLQATPQFHPGYPLKEKYYGAVG STLRLHVMYIGRPVPAMTWFHGQKLLQNSENITIENTEHYTHLVMKNVQRKTHAGKYKVQL SNVFGTVDAILDVEIQDKPDKPTGPIVIEALLKNSAVISWKPPADDGGSWITNYVVEKCEAKE GAEWQLVSSAISVTTCRIVNLTENAGYYFRVSAQNTFGISDPLEVSSVVIIKSPFEKPGAPGKPT ITAVTKDSCVVAWKPPASDGGAKIRNYYLEKREKKQNKWISVTTEEIRETVFSVKNLIEGLEY EFRVKCENLGGESEWSEISEPITPKSDVPIQAPHFKEELRNLNVRYQSNATLVCKVTGHPKPIV KWYRQGKEIIADGLKYRIQEFKGGYHQLIIASVTDDDATVYQVRATNQGGSVSGTASLEVEV PAKIHLPKTLEGMGAVHALRGEVVSIKIPFSGKPDPVITWOKGODLIDNNGHYOVIVTRSFTSL VFPNGVERKDAGFYVVCAKNRFGIDQKTVELDVADVPDPPRGVKVSDVSRDSVNLTWTEPA SDGGSKITNYIVEKCATTAERWLRVGQARETRYTVINLFGKTSYQFRVIAENKFGLSKPSEPSE PTITKEDKTRAMNYDEEVDETREVSMTKASHSSTKELYEKYMIAEDLGRGEFGIVHRCVETSS KKTYMAKFVKVKGTDOVLVKKEISILNIARHRNILHLHESFESMEELVMIFEFISGLDIFERINT SAFELNEREIVSYVHQVCEALQFLHSHNIGHFDIRPENIIYQTRRSSTIKIIEFGQARQLKPGDNF RLLFTAPEYYAPEVHQHDVVSTATDMWSLGTLVYVLLSGINPFLAETNQQIIENIMNAEYTFD EEAFKEISIEAMDFVDRLLVKERKSRMTASEALQHPWLKQKIERVSTKVIRTLKHRRYYHTLI KKDLNMVVSAARISCGGAIRSOKGVSVAKVKVASIEIGPVSGOIMHAVGEEGGHVKYVCKIE NYDQSTQVTWYFGVRQLENSEKYEITYEDGVAILYVKDITKLDDGTYRCKVVNDYGEDSSY AELFVKGVREVYDYYCRRTMKKIKRRTDTMRLLERPPEFTLPLYNKTAYVGENVRFGVTITV HPEPHVTWYKSGQKIKPGDNDKKYTFESDKGLYQLTINSVTTDDDAEYTVVARNKYGEDSC KAKLTVTLHPPPTDSTLRPMFKRLLANAECQEGQSVCFEIRVSGIPPPTLKWEKDGQPLSLGP NIEIIHEGLDYYALHIRDTLPEDTGYYRVTATNTAGSTSCQAHLQVERLRYKKQEFKSKEEHE RHVQKQIDKTLRMAEILSGTESVPLTQVAKEALREAAVLYKPAVSTKTVKGEFRLEIEEKKEE RKLRMPYDVPEPRKYKQTTIEEDQRIKQFVPMSDMKWYKKIRDQYEMPGKLDRVVQKRPKR IRLSRWEQFYVMPLPRITDQYRPKWRIPKLSQDDLEIVRPARRRTPSPDYDFYYRPRRRSLGDI SDEELLLPIDDYLAMKRTEEERLRLEEELELGFSASPPSRSPPHFELSSLRYSSPQAHVKVEETR KDFRYSTYHIPTKAEASTSYAELRERHAQAAYRQPKQRQRIMAEREDEELLRPVTTTQHLSEY KSELDFMSKEEKSRKKSRRQREVTEITEIEEEYEISKHAQRESSSSASRLLRRRRSLSPTYIELM RPVSELIRSRPQPAEEYEDDTERRSPTPERTRPRSPSPVSSERSLSRFERSARFDIFSRYESMKAA LKTQKTSERKYEVLSQQPFTLDHAPRITLRMRSHRVPCGQNTRFILNVQSKPTAEVKWYHNG VELQESSKIHYTNTSGVLTLEILDCHTDDSGTYRAVCTNYKGEASDYATLDVTGGDYTTYAS ORRDEEVPRSVFPELTRTEAYAVSSFKKTSEMEASSSVREVKSOMTETRESLSSYEHSASAEM KSAALEEKSLEEKSTTRKIKTTLAARILTKPRSMTVYEGESARFSCDTDGEPVPTVTWLRKGQ VLSTSARHOVTTTKYKSTFEISSVQASDEGNYSVVVENSEGKQEAEFTLTIQKARVTEKAVTS PPRVKSPEPRVKSPEAVKSPKRVKSPEPSHPKAVSPTETKPTPTEKVQHLPVSAPPKITQFLKAE ASKEIAKLTCVVESSVLRAKEVTWYKDGKKLKENGHFQFHYSADGTYELKINNLTESDQGE YVCEISGEGGTSKTNLQFMGQAFKSIHEKVSKISETKKSDQKTTESTVTRKTEPKAPEPISSKP VIVTGLODTTVSSDSVAKFAVKATGEPRPTAIWTKDGKAITOGGKYKLSEDKGGFFLEIHKTD TSDSGLYTCTVKNSAGSVSSSCKLTIKAIKDTEAQKVSTQKTSEITPQKKAVVQEEISQKALRS EEIKMSEAKSQEKLALKEEASKVLISEEVKKSAATSLEKSIVHEEITKTSQASEEVRTHAEIKAF

STQMSINEGQRLVLKANIAGATDVKWVLNGVELTNSEEYRYGVSGSDQTLTIKQASHRDEGI LTCISKTKEGIVKCQYDLTLSKELSDAPAFISQPRSQNINEGQNVLFTCEISGEPSPEIEWFKNNL PISISSNVSISRSRNVYSLEIRNASVSDSGKYTIKAKNFRGQCSATASLMVLPLVEEPSREVVLR TSGDTSLQGSFSSQSVQMSASKQEASFSSFSSSSASSMTEMKFASMSAQSMSSMQESFVEMSS SSFMGISNMTQLESSTSKMLKAGIRGIPPKIEALPSDISIDEGKVLTVACAFTGEPTPEVTWSCG GRKIHSQEQGRFHIENTDDLTTLIIMDVQKQDGGLYTLSLGNEFGSDSATVNIHIRSI >DP01388|P0CU52|#1-227

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>DP01875|Q2GI62|#142-221

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>DP00068|P60881|#1-206

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>DP01096|Q25733|#576-754

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YPTVDKSLQKLNDEAICKKPPNVGNEKASTVDFNNEVNTTFSHTTYCEACPWCGAQKEKNG GGWKAKEKSCAKKKERIFNKENSTDIKILTPEKGRSKTLEKLKTFCKDGQKIKNDIWKCHYD DNGTDDQTDDSNDCVLGDWGNLTKEDKIMSYNAFFWMWVHDMLIDSIKWRDEHGRCINK DKGKTCIKGCNKKCICFQKWVEQKKTEWGKIKDHFRKQKDIPKDWTHDDFLQTLLMKDLLL EIIQDTYGDANEIKRIEALLEQAGVGGIDFAALAGLYTKGFVAEKDTTIDKLLQHEQKEADKC LKTHTDDTCPPQEDRSVARSESATVPSPPADPKATEEVDANASSDDEDDFEEEEEEEEEEEEE EAEEVQEEKTDESATEAVAPSPPGTTQDGVKPASQEDDVKVCSIVDKALKGKLDDACTLKY GKTAPTSWKCIPSGNNTTTESTTKPGAAGTPSGKDTGSICVPPRRRKLYVGKLHDWAGGETT EAKSQETSGGOKTPSGNESSPSEKLPQGPTPETTKETPESSLLHAFVSPPRLRRFLPWHKFKEQ WKAQHGAGATGQQTIIGTLDGGGEETPDKLLKTGHIPPDFLRQMFYTLGDYRDILVGNTDIV VHTSGNKEDMQIMEAIQKKIEQILPTSGSSPSPPRVTQTQHSVENPRKTWWNENGKKIWEGM VCALTYNTDTPSGTAPTQIQEVRTKLRDENSKNPKIPQYKYDQVKLDDTSDAKTTGSPVPSGE KITPLTDFISRPPYFRYLEEWGETFCKERKKRLEKIKEECRGDRTGHEHCSGDGYDCTRTDAD RNDKFVDLNCRDCHIQCRKYRKWIDIKFDEYHKQEKKYQGEYDKLTKDKSSGGDNNCCKDI EKHKSAAVFLKELKHCKNGQTSENKGNQEDQLNKLDFDKIPQTFSPSTYCKACPVYGVNCN GNKRGRGGTNGCTTNNEPENKENDKGAASTISILINDGSTNGATNGTTGTTDETLKECSDKY AFFKGLRKQEWTCQKKYGVNQCNLTNRVNDTYFDKDIVFNEFFQRWLRYFVHDYNILKHKI DPCIKKEKQDKTEHKCINGCNIKCECVRKWLEIKGNEWGNIKKHYNINSNDDKETIAYNVKS YFVDQGLFDTDYKKAQKVVEDEKERKKIWGCTGHDECSEKEKEENKNFITNLISELQDKITS CONKHNPNGKTACDPFPSPTPEETDPLDDDTPDPLDDDOHTEOPKFCPPPPPPMTCVEKIAKE LRVEAEGKINNELKGNGKDFNGKCNNVKKKNGAVIGEESCKFEQTYENSVNNINNKCKDNQ NERFKIGOKWNFKYIGTIRKDLCIPPRREHMCLDDLSMLGRTTISDSSALLKKIQEAAKSERDD IIRKLLEQNSCDEHRICDAMKYSFADLGDIIRGRDLWNKNSKQKGLQKRLEYAFINIYNKLQN DKNKYEKDRPKYLOLRSDWWDANRKHIWNAMTCNAPDDAKFLKKNPNDTSGSSSSKGIMT THSNCGYDKEPPDYDYIPQPFRWMQEWSESFCKLLNEEMEQFEKTCGECKKNSITCEDDRNG TNCENCKNOCEKYKKLIHNWKLGFDKYKEIYNEIYNNKDSKINSNEYFKKFLEKLKDKCKEL NSSDKCIDEATHCTKYKFSNSENKNHNNYAFKNPPKEYEKACKCDAPDPLDNCPKDSATYEK ACNTLLPTKLCESKTFNNDDDSWDTSFVQTSPRDNTGVLVPPRRRQICLKNITTKLRSIEKIDD FKAELMTSAYNEGKLLCELYKKDRDVTLQAMKYSFYDYGDIVKGTDLISTAPLDKLKTKLN VLLKGDGTNEIKEDRGKWWTENRTRVWHAMLCGYKAAGGKIEERDCSLPDDNTHQFLRWF REWSEHFCAKRQKLFNEVKRECASAQCIIEYGTIDPPVCEEACTQYRDYITRKIQEYRLLNYQ YNTNFNEKKAEVTKAPEYFNDKCNDKCNCLSKYIDIEKKWKNMYDSFDDNDLKNKCICRQI KPKRPPKKVKPEEEHTPSEQDTPPPLPPKPDDLPPPAEEPFNRDILEKTIPFGIALALGSIAFLFL KKKTKSSVGNLFQILHIPKSDYDIPTKLSPNRYIPYTSGKYRGKRYIYLEGDSGTDSGYTDHYS DITSSSESEYEELDINDIYVPGSPKYKTLIEVVLEPSGNNTTASGKNTPSDTQNDIQNDGIPSSKI TDNEWNTLKDEFISNMLQNEPNTEPNMLGYNVDNNTHPTTSRHNVEEKPFIMSIHDRDLYSG EEYSYNVNMVNNDIPISARNGNYSGIDLINDSLNSNKVDIYDELLKRKENELFGTNHTKKNTS TNSVAKNTNTDPIHNQLNLFHTWLDRHRDMCEKWDTNNKKEELLDKLKEEWNKDNNSGNI NPSGNTPPTSDIPSGKOSDIPSDNNIHSDIPYVLNTDVSIOIHMDNPKPINEFSNMDTYPNNSSM DTILEDLDKPFNEPYYYDVQDDIYYDVHDHDTSTVDTNAMDEPSKVQIEMDVNTKLVKEKY **PIADLWDI**

>DP01063|Q9Y6C2|#927-951

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DGFRRQQQEDRERLRAMEKLLASVEERQRHLAGLAVGRRPPQECCSPELGRRLAELERRLDV VAGSVTVLSGRRGTELGGAAGQGGHPPGYTSLASRLSRLEDRFNSTLGPSEEQEESWPGAPG GLSHWLPAARGRLEQLGGLLANVSGELGGRLDLLEEQVAGAMQACGQLCSGAPGEQDSQV SEILSALERRVLDSEGQLRLVGSGLHTVEAAGEARQATLEGLQEVVGRLQDRVDAQDETAAE FTLRLNLTAARLGQLEGLLQAHGDEGCGACGGVQEELGRLRDGVERCSCPLLPPRGPGAGPG VGGPSRGPLDGFSVFGGSSGSALQALQGELSEVILSFSSLNDSLNELQTTVEGQGADLADLGA TKDRIISEINRLQQEATEHATESEERFRGLEEGQAQAGQCPSLEGRLGRLEGVCERLDTVAGG LQGLREGLSRHVAGLWAGLRETNTTSQMQAALLEKLVGGQAGLGRRLGALNSSLQLLEDRL HQLSLKDLTGPAGEAGPPGPPGLQGPPGPAGPPGSPGKDGQEGPIGPPGPQGEQGVEGAPAAP VPQVAFSAALSLPRSEPGTVPFDRVLLNDGGYYDPETGVFTAPLAGRYLLSAVLTGHRHEKV EAVLSRSNQGVARVDSGGYEPEGLENKPVAESQPSPGTLGVFSLILPLQAGDTVCVDLVMGQ LAHSEEPLTIFSGALLYGDPELEHA

>DP00224|P15884|#1-130

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>DP01368|Q8WXE9|#301-331 #301-340

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>DP01381|P0CU46|#1-237

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>DP00798|O14214|#1-83 #271-304

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MKIKPLIQLKLLGLFLFSCTIDANLNEDYKNKVKGILNKAADDQETTSADTNSNAAKNIPIAD NDKVAAELKKQSQAAKTVAAAPNKGSQNQPQTTPNKGSQNQQAAPSPQLQSLSFSADLSNL PKTTAARAASLTKQRIPIQAVTTVPGNTRTFNSRNSGLPTFALNYSFSQPTRQQTNSSSAVQTT TSSGSKLQTLKNELIRAISEEKNKTQNNFGFRETYDQFKMKDSAFELLDVISSAKVYDRSYAP QLNSNTPEAENERNKFYALMDFDQYKIEQFGSIMEALYNENQNHSLIRELMISGLGTQISFELA LEEINKKIEIFNQDYLNAKINSFDFTMKLKELKSKLNQILDKRKEWSRQADGLIANASSNSSLS DSKSLAEYIKKRYLDNMQNARQSVLEAYISIM

>DP00804|P0A311|#19-38 #43-47

MNNVKELSMTELQTITGGARSYGNGVYCNNKKCWVNRGEATQSIIGGMISGWASGLAGM >DP00948|P59595|#1-44 #182-247 #248-259 #366-422

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MAGGAWGRLACYLEFLKKEELKEFQLLLANKAHSRSSSGETPAQPEKTSGMEVASYLVAQY GEQRAWDLALHTWEQMGLRSLCAQAQEGAGHSPSFPYSPSEPHLGSPSQPTSTAVLMPWIHE LPAGCTQGSERRVLRQLPDTSGRRWREISASLLYQALPSSPDHESPSQESPNAPTSTAVLGSW GSPPQPSLAPREQEAPGTQWPLDETSGIYYTEIREREREKSEKGRPPWAAVVGTPPQAHTSLQ PHHHPWEPSVRESLCSTWPWKNEDFNQKFTQLLLLQRPHPRSQDPLVKRSWPDYVEENRGH LIEIRDLFGPGLDTQEPRIVILQGAAGIGKSTLARQVKEAWGRGQLYGDRFQHVFYFSCRELA QSKVVSLAELIGKDGTATPAPIRQILSRPERLLFILDGVDEPGWVLQEPSSELCLHWSQPQPAD ALLGSLLGKTILPEASFLITARTTALQNLIPSLEQARWVEVLGFSESSRKEYFYRYFTDERQAIR AFRLVKSNKELWALCLVPWVSWLACTCLMQQMKRKEKLTLTSKTTTTLCLHYLAQALQAQ PLGPQLRDLCSLAAEGIWQKKTLFSPDDLRKHGLDGAIISTFLKMGILQEHPIPLSYSFIHLCFQ EFFAAMSYVLEDEKGRGKHSNCIIDLEKTLEAYGIHGLFGASTTRFLLGLLSDEGEREMENIFH CRLSQGRNLMQWVPSLQLLLQPHSLESLHCLYETRNKTFLTQVMAHFEEMGMCVETDMELL VCTFCIKFSRHVKKLQLIEGRQHRSTWSPTMVVLFRWVPVTDAYWQILFSVLKVTRNLKELD LSGNSLSHSAVKSLCKTLRRPRCLLETLRLAGCGLTAEDCKDLAFGLRANQTLTELDLSFNVL TDAGAKHLCORLROPSCKLORLOLVSCGLTSDCCODLASVLSASPSLKELDLOONNLDDVG VRLLCEGLRHPACKLIRLGLDQTTLSDEMRQELRALEQEKPQLLIFSRRKPSVMTPTEGLDTG EMSNSTSSLKRORLGSERAASHVAOANLKLLDVSKIFPIAEIAEESSPEVVPVELLCVPSPASO GDLHTKPLGTDDDFWGPTGPVATEVVDKEKNLYRVHFPVAGSYRWPNTGLCFVMREAVTV EIEFCVWDQFLGEINPQHSWMVAGPLLDIKAEPGAVEAVHLPHFVALQGGHVDTSLFQMAH

FKEEGMLLEKPARVELHHIVLENPSFSPLGVLLKMIHNALRFIPVTSVVLLYHRVHPEEVTFHL YLIPSDCSIRKAIDDLEMKFQFVRIHKPPPLTPLYMGCRYTVSGSGSGMLEILPKELELCYRSPG EDQLFSEFYVGHLGSGIRLQVKDKKDETLVWEALVKPGDLMPATTLIPPARIAVPSPLDAPQL LHFVDQYREQLIARVTSVEVVLDKLHGQVLSQEQYERVLAENTRPSQMRKLFSLSQSWDRK CKDGLYQALKETHPHLIMELWEKGSKKGLLPLSS

>DP00792|P36886|#1-42 #127-131

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>DP01864|Q9XTN4|#1-101

>DP01090|G4SLH0|#3546-3795 #4627-8512

MEGNEKKGGGLPPTOORHLNIDTTVGGSISOPVSPSMSYSTDRETVMRSASGHATVAETHLIR SIGSQSQSYTEEHWSSEITSFVALAPPKFIQVIKAYRVHSTDTISLVVEVASDPPAIFEWFYNEK SVLODRDRFOVGHGINISRLKVSRPEOGVYKCVTRNPAGVSTSYGYITVNADREHLSSSKED MRLQRQHSVTYHQAPRFLTQVPNLFVTAGSNVIIDVEVDANPPARFSWFVNGKEYRDSIHGV EMFSPDVNRSVVRFSIPVAGEYKVVASNVHGSAMSCGHVDIQKVIELEESTLTTSTTAFDPMT TSMRALGNNGRNSRQAVNMFELNYTQRSSSVPRGVRHLESHIEVSNMTGEEKKTQQQTRTD AASIVESRFHPQPPKPPRAGTSRRFLPEPPKFVTTLPSVITVNAEEKLVLSVDVQAIPAAEFAW HVNGFEVKKSQSVVLLDEHNKSTLVLHPPVKQGKYKVTARNDVGSDSVTTQVTRIGEVKDG AGSEPPDIVESAVTVTCSHEEDVGSHSSLQTVRRIQEMQEEDEVDPIKPFIEATSPKVKESVEHP FANILNPKKREERLSPSGKGKHLLFAPRITAHPSESVFKILDGSPLKLRVMASSLPPATFLWML NNFELRSNONVTIRNDEENSSEIEFQKAPNGNVTVSAKNHLGEDRWTGKVILQYESPPPGQKI TTIEKVTESWTLEEAVITQVVPTAADPGDRIVIIVRFDENKTSNCQFNWTINGVNIEKLEENLV AVESTEFESSLIVEKLEEQLCGEVVCVVKNQHGEVFSSSAHLRIRDDDSSFEIVPPNLPEECAPK IVEPLHSASFLDGQAMSLRCKITANPSAAVVWSKDDVNVEDWVLNKDVTTTVLDGGVCELL NPECFAEDAGLYKCTATNPHGTAETAAFINVEGAEYIKDHEEAEISESVLTDDVHIILPPKFIET LTAETDNFOOLGYVRMVATVRSVAPITVSWOKDGMDIYENEKYEVMOFADGAOILTIRAPT NLDSGVYTCTAESEHGVSNSSCQVELTISAESSPESFEKVEITPPEEVKETGIDDDIEVILKEEVS GTAQIEKREEEFKLLVKVADQVASTLVANVFLEAVHEAVKKIVETEDEEEDNQIEATQEPRFE TSTDEYHVKENGTIKMAATISGHPTPFLEWYFGEEKLQVSQNVSMYYEAGTSAIILKNVQKR OGGNYFLRAHNCHGESILPMKLTVDPIEAVTHVLETSIPKVVVEODAKEEEVRRAAEIISEOFA QLWVQDAQTEAVSAQAHQTPVVAEQASEEPTLPEVVAALQEQKPSVEKAPQPQFEVLETED ODVVEOMOKOLPPVOKSMSVOEEKASSORTPSPMNYEDKVKTIOSNLLRVNSHEAMEPIEAT NLLLNTALQLKNEHVCDETTTVIVTQQPQKYDQLVTVVESNIEYHALRLSTSSSSPLKFIDLET IIQKPSTSCESIDRMFVEKSKRTANAQHRIVVLQGMSNTFHNAITWSLKKVKKLVGDAEAKA

YADVEVVKQDETNEQVMTIIDNDTIVPQLLQVAAAANKLKLENVSVALIKEGDRAHQELVIE YESSIDEPMFEPVHNTSHLTFHQQQPTGPDQHVWSRRSKFEEDEAHVVAVFVEVDANCPDQS VEIVATVNAAYEGDNRQGIEDEPFTEVSQSLATESSAAPQAPKFLRKLVNCFGRIGEPVQLKC LIAGMPQPEIEWTVDGDPIVPNDEYSIVYEDGVCILRIESTLIEDEGEYCCTASNVAGTTFSKCY LKLSEADDDAVDLLROLSEIKIIDPTLSTGYPMSMISDEENTSHOLLSNVLLTDKEVPITATYN EDLSRAESFRRFFESAETTVKVTELYQGESVEAQFQQPEKREQVSTSNTDVMFVNQKVDVME STVSTVGNAVRQSVSSSTNSWDYMFNDPFPESQEINVIENELYEPRVPLLPQKLSYKGQEIFAN TNTVERNSKAGAKAKGEVENLKKCVETLLLFDAEMDMKDIKESSPKKEIISKKDOOSLDDOI KVTQQILKDVERDLNKMERTSPGKSLSPNKRTFAPKDVEDIEAAIFSISDQLADRQSSEEALRE ALQEMILSNSSPMKELSRNNETSKPEVLKSEIQKIPEVETKISEVYPIVKLKQAISAIENSLLEDT EVTEIMKRKGSDKDKRKATRIKRVPSAHSARITPITSNLRDRLNQLHQLTVSEDSGSLKQNEE AKEIQELFVKIEKEINTIAELCKEKMTKKGADTVTHVLNSVLQHVASIINVILVAQDHQPIEVH AETTKTAEVSVWYSFDVHPESEDIIGIVDEEPTNRRPSSTPRGSTRSSNLTTSQDSQATTKMTV SSEDTIEAPIAPPRKGRSLSRDAERLLEIOPRAPPRRSROSGDTLSPEPTPVLTLVKSDETPAPVR PPRSRSRHSGDELAETSPEAQPIRPPRSHSRHSGDELEEVQPVRPPRSKSKTADANCLQIESMD ESQYSLSCIHIQKTNFAFTNSTHETSNASVVVDLRNMAQLECTVQSLDDLASIQMLCEESDYP SDTDRSLLLAGTVRYFNRASPSLHEVSPSLNMESVSMDLKPETEPEEIVQDVYVNVELHSVPS LSSLVEVNPNTLMOTLASEKSSLKAAEEDEKEGEEEGEEEVTADVSFIGRSVLSTETLDVVLE EKDMSQMNSTLPLDYERAFSSNTIRETDILSDESITVDSSYHKSPEPTVDFARSQVKSEEVTEN FSLIHKPARRRVTGIVVNSLIYTIAANIAEDNTFDVDVVOEPORYNISIKVIEDIVDFTSLTIMSD CEDDPPADVLVLKQDTSKLQALSYDDISVATTRTGITVSIVARSLNDGIYASLEEIAWGEVEM TVPDIMQMSTEEKSSLQFNVTVSESNLEEAKSLKSQVSFRSSQNSVSEMDNTISSTATISIPSYV VKLESTATITCELNNYLPKNCTIDWYCGKTKIIIDHEQFDRISHDLLEVLIIRSVEAINGNLYSLK INEDLFPVAYLIVENTNLTTSANILTRPETQFVMEGQPTVITVELDDPNVIVNWLKDRRPLHEN ERIRLETDGQGNHRVIIPNTCVGDQGTYLALTSSESVAITLVVEERIEEKEVMVIASGTESEED DVOEYLVPPGSTATIACELEECELKRSIRWLRDGKDIRFEOGKTEHVONGLKHYLVVHDATS LDSGLYKTERSEEQCEETIIPRGVVATIQCOTSEPQESIQWSKDGNIIPSDISRFEFRSLDNNQSH EMVISNISWSDAGVYSVLINGKSSFVSKIVVVESELITQSVEEEPEAEPEIDVSLHIVESEQIIELN VPQSPKLGASHETLVPIGQDDIEVIDKQEAAPVVESIEETSSIGSEEFEIIEKFTEEEVPKVAEPSE PTQADVPKIAAPLEQSQIQQEVPTVAAPSEPTQADVPKEAAPSEPSQADVPKVAAPLEQTQIQ QEVPMVAAPLEPTQADVPKVAAPLEQSQIQQEVPTVAAPSEPTQADVPKEAAPSEPSQADVP KVAAPLEQTQIQQEVPMVAAPLEPIQEEVPKEAAPSEPTQEDVPKGAAPLEPTQEDVPKEAAP SGPTQEDVPKEEAPSEPTQEDVPKEAAPSEPTQENVPKEAAPSEPTKDVPKEAAPSEPIQEEVP KEATLSEPTQEQSEVSKRSEPVEPTQIQQAASEEETPLEETNETVVQTNEDVKEAEVPENAEA QKVVDSSDLQVAASEIAHLAIDEAVLETSNQPSQFDSLQEQKPSVVHENEHVRSVCVDLTFSR DSEQIVSDVIVAEVGYDEDECSTIADTITSLSSSPLYTAPVFTERLPSSACFANSKLTLEVMFSG VPQPTISWLIDDHELVSDGERISIKCENGVSAIRFFNVDRNAGGFLKCRATNCAGQVETSCEIV AADEISVISDSSITSSTRPHFVVPLPERVTHTVNDHITIKCKFSGQPLPAAMWEKDGVLLDLQK YOVTTEDGTSILKIESASLDDKAVYTCTIANEAGCESTSCTIDVVDDHLGLOOTGLHVMCERD QNDVELDILVQSPNHLGVTFNFPPVNRTLARQPPYFLLPLSDKVVIDEKCTLKCVVMGIPLVIV KWIVDGVVVTEDDNHEIHFEDGIALLRMKNIKKDKSVVQCEAINCKGKVTTSCVLTKCGVEE SEAGDLQKPSFVLSLKDTCTTTDHATLKCIVVGTPLPDVSCSFNGVTDNSKIRSEDGIVLIQVN DVTEEGIVVECTISNETGSSTSNCVVKIIKOEEKNYORPIIVFNOAGSVNNERELSVKVGVIASP EPTLFWKHNGKSIEEGGDYYLIFEDGIGILKVFNIQDGSHEFTCIAKNEYGQTTVEIPVEIGLKT ENKLTLVKTLNDIAVVDDIVOLKIVAEGDLPIEFKWFEDGOILEDDSSHKITVDKCISTLOLKL EETGTRIITCEVSNSSSKVNASCNVERVHNTVSDFVMTNDNSTRFLAVGRKCTRERNNTILKA VVVARENIGDICEIDGEKIPDAYIEGNSLSIKVDTLSKKLSNVSFKVSASEGKVFETRKIEIAQE

DTDEENFEINYSLRIDEOSGNTTYTFENSELYOGNOSRELDNTERNFTVNKEKDESKKPSEVO PAEIVEOKDVPVOETSAPTVEKLAPVESKETPEVQAAEIVEOKDVPVPETRAPTVEPTVEKHT PVDSKETSEVEPAEIVEQKDVPVPETSAPTVEPTVEKHTPVESKEKSEVQPAEIVEQKDVTCEE EIKELLTEVEVELFFSQAEVFSGLELDLLMECSEYVTTSIQKGSTAAPAQEPTVEKLAPVESKE TSEVEPAEIVEOKDVPVPETSAPSVEPTVEKLAPVESKETSEVOOAEIVEOKDVPVPETSAPSV EPTVEKLAPAESKETSEVQPAEIVEQKDVTCEEEIKELLTEVEVELFFSQAEVFSGLELDLLME CSEYVTTSIQKGSTAAPAQEPTVEKLAPVESKETSEVQQAEIIEQKDVPVPETSAPTVEPTVEK LKPVESKETSEVQQVEIIEQKDVPVPETSAPTVEPTVEKLAPVESKETSEVQQAEIIEQKDVPVP ETSAPTVEPTVEKLKPVESKETSEVQQVEIIEQKDVPVPETSAPTVEPTVEKLAPVESKETSEV QQAEIIEQKDVPVPETSAPTVEPTVEKLKPVESKETSEVQQVEIIEQKDVPVPETSAPTVEPTVE KHAPVESKETSEVQPAEIVEQKVVPVPETSAPTVEPTVEKLAPVESKETPEVQPAEILEQKDVT CEEEIKELLTEVEVELFFSKAEVFSGLELDLLMECSEYVTTSIQKGSTAAPAQEPTVEKLAPVE SKETSEVEPAEIVEQKDVPVPETSAPTVEPTVEKLKSVESKETSEVQQAEIIEQKDVPVPETSAP TVEPTVEKLAPVDSKETSEVEPAEIVEQKDVTCEEEIKELLTEVEVELLFSQAEVFSGLELDLL MECSEYVTTSIQKGSTAAPAQEPTVEKLAPVESKETSEVEPAEIVEQKDVPVPETSAPTVEPTV EKLKSVESKETSEVQQAEIIEQKDVPVPETSAPTVEPTVEKHAPVESKETSEVQPAEIVEQKVV PVPETSAPTVEPTVEKLAPVESKETSEVEPAEIVEQKDVPVPETSAPTVEPTVEKLAPVESKETS EVEPAEIVEOKDVPVPETSAPTVEPTIEKLAPVESKETSEVEPAEIVEOKDVSVPETSAPTVEPTI EKLAPVESKETSEVEPAEIVEQKDVSVPETSAPTVEPTVEKLAPVESKETSEVEPAEIVEQKDV PVPETSAPTVEPTVEKLAPVESKETSEVOPAEIVEHKDVOVPETSSPTVEPTVEKLAPVESKET SEVEPAEIVEQKDVPVPETSAPTVEPTVEKLAPVESKETSEVEPAEIVEQKDVPVPETSAPTVEP TVEKLAPVESKETSEVQPAEIVEQKDVSVPETSAPTVEPTVEKLAPVESKETSEVQPAEIVEQK DVPVPETSAPTVEPTVEKLAPVESKETSEVQPAEIVEHKDVQVPETSSPTVEPTVEKLAPVESK ETSEVEPAEIVEOKDVPVPETSAPTVEPTVEKLAPVESKETSEVOPAEIVEHKDVOVPETSAPT VEPTIEKLAPVESKETSEVEPAEIVEQKDVSVPETSAPTVEPTIEKLAPVESKETSEVQPAEIVEH KDVOVPETSSPTVEPTVEKLAPVESKETSEVOPAEIVEOKDVTCEEEIKELLTEVEVELFFSOA EVFSGLELDLLMECSEYVTTSIQKGSTAAPAHEPTVEKLAPVESKETSEVEPAEIVEQKDVPVP ETSAPTVEPTVEKLAPVESKETSEVEPAEIVEQKDLPVPETSAPTVEPTVEKLAPVESKKTSEV EPAEIVEQKDVPVPETSAPTVEPTVEKLAPVESKETSEVEPAEIVEQKDVPVPETSAPTVEPTVE KLAPVESKETSEVEPAEIVEQKDVPVPETSAPTVEPTIEKLAPVESKETSEVEPAEIVEQKDVSV PETSAPTVEPTIEKLAPVESKETSEVEPAEIVEOKDVSVPETSAPTVEPTVEKLAPVESKETSEV EPAEIVEQKDVPVPETSAPTVEPTVEKLAPVESKETSEVQPAEIVEHKDVQVPETSSPTVEPTV EKLAPVESKETSEVEPAEIVEQKDVPVPETSAPTVEPTVEKLAPVESKETSEVEPAEIVEQKDV PVPETSAPTVEPTVEKLAPVESKETSEVQPAEIVEHKDVQVPETTATTFEPTKEKLAPVDSKET SEVQTAEIVEQKDVPVPETSATTVEPTKEKLAPGESKETSEVQQAAIVEQKDVAVPETSATTV EPTKEKLAPVESKETSEIQTAEIVEQKDVPVPETSTSYVEPTKEKLAPGESKETSEVQQAAIVE QKDVPVPETSATTVEPTKEKLAPVESKETSEIQQAAVVEQKDVPVPETSATTVEPTKEKLAPV ESKETSEVQQAAIVEQKDVPVPEANAPTFEPTVEKLAPVESKETSEVQQAAIVEQKDVPVPEA NAPTVEPTVEKLAPVESKETSVESKETOADAKLKKEKDDKHKOEADAKLOKENDDKLKOEA DAKLKKENDDKLKQEADAKLKKENDDKLKQEADAKLKKENDDKLKQEAAAKLKKENDDK LKQEADAKLKKENDDKLKQEADAKLQKENDDKLKQEADAKLQKENDDKLKQEADAKLQK ENDDKLKQEADAKLQKENDDKLKQEADAKLQKENDDKLKQEADAKLKKENDDKLKQEAD AKLKKEKHDKLKQEADAKLQKENDDKLKQEADAKLQKENDDKLKQEADAKLQKEKDDKL KQEADAKLKKEKDDKLKQDADAKLQKEKDDKLKQEADAKLKKEKDDKLKHEADAKLQKE KDDKLKOEADAKLKKEKDDRLKKDADAKLOKEKDDKLKOEADAKLKKEKDDKLKHEADA KLOKEKDDKLKQEADAKLKKEKDDKLKQEADAKLQKEKDDKLKQEADAKLKKEKDDKLK QEADAKLQKEKDDKLKQEADAKLKKEKDDKLKQEADAKLQKEKDDKLKQEADAKLKKEK

DDKLKQEADAKLKKEKDDKLKQDADAKLQKEKDDKLKQEADAKLKKEKDDKLKHEADA KLKKEKDDKLKQEADAKLKKEKDDKLKQDADAKLKKEKDDKLKHEADAKLQKEKDDNFK QEANAKLQKEKDDKLKQEKDDNFKQEANAKLQKEKDDKLKQEKDDKLKQEADAKLKKEK DDKLKQEADAKLKKEKDDKLKQEADAKLKKDKDDKLKQEADAKLKKEKDDKLKQEADA KLKKDKDDKLKQEADAKLKKDKDDKLKQEADAKLKKEKDDKLKQEKNDKLKQEADAKL KKEKDDKLKQEADAKLKKEKDDKLKQETDAKLKKDKDDKLKQEADAKLKKDKDDKLKQE ADAKLKKDKDDKLKQEADGKLKKEKDNKLKQEADGKLKKEKDNKLKQEADAKLKKEKD DKLKQEADAKLKKEKDDKLKQEADAKLKKDKDDKLKQEADAKLKKEKDDKLKQEADAKL KKDKDDKLKQEANAKLQKEKDDKLKQEADAKLQKEKDDKLKQEADAKLKKEKDDKLKQE ADAKLQKEKDDKLKQEADAKLKKEKDDKLKQEADAKLQKEKDDNFKQEANAKLQKEKDD KLKQEKDDKLKQEADAKLKKEKDDKLKQEADAKLKKDKDDKLKQEADAKLKKEKDDKLK QEADAKLKKEKDDKLKQEADAKLKKDKDDKLKQEADAKLKKDKDDKLKQEADAKLKKE KDDKLKQETDAKLKKDKDDKLKQEADAKLKKEKDDKLKQEADAKLKKEKDDKLKQEADA KLKKEKDDKLKQEADAKLKKDKDDKLKQEADAKLKKDKDDKLKQEADGKLKKEKDNKL KQEADGKLKKEKDNKLKQEADAKLKKEKDDKLKQEADAKLKKDKDDKLKQEADAKLKKE KDDKLKQEADAKLKKEKDDKLKQEADAKLKKDKDDKLKQEADAKLKKDKDDKLKQEAD AKLKKEKDDKLKQEADAKLKKDKDDKLKQEADAKLKKDKDDKLKQEADAKLKKEKGDK LKLEDQTNQSRIFEETSIEVTSLLKCKQQAIIVSKSFALCERVVLNAEEPFTLEVFCNAVFVKQR TDKIGIGIIFERSGASKKDESRPDRLDDNCVLTDVTDGLSILSPPPKAKKHLKKKKHHKKEKI AVKETEODEKTVSHLKPEISGMERKRSNSGSSDIFVDVDIEAGEESIHTDALVDLNFYDYDOM ELSIFEDYDSDDDSASIDCDVSLSNVAADDGIDVFPSDGDTQEVEQKVTLPKKHQSDEDVISK EEENLETSVSYGSIEETVSFTIGTGQSIIEHPKSHAVGQMNSEVIIKCKTSQPISDAKWFCNGMV LLPDEQVNMTVTGCEAVLRLVKFLPQNKGNYHVLIDGSIGSQPAILSGPVPPVILNKLTKPITH OAGKSFTYKFNFMGAPAPRLRVLSNGEPVSFDVKYEIYDNIASLYIPKMSKRDGGEYTVVLE NKYGKDESDLHITMVDTPLKPRKAQLVALTDTSATFKWLPPHTGESDILHYIVMRRSTESRR WRNIGHVOEKTFTAIELVPNEFYAFRIVAVNGFGEGAPSEIIEVNTLDYDOEESFDFAGEEELK LDDVQVNNEVVTEITIEESEVTIEEHRKLKKKSKKSKKTTDEPELDSEIALEVSSDITSSLEITTE STIPDTAPESQETLNVEIAVTETTVQKITNPSDESAKKDVNEDTAVSSIVKKDDKDVNKKSLPE SGLTTKKEIQGKPEKKIMKKKTEKADSSISETSETLTKDLTQTKQSEPEPAKRTTETSVQDEVK RKTETTSKSKQTTEEHPQPGGKSDSSISSTSDASEVKQVQQSESEAQKVTEKPETAKLESKSK MTEDTTKESDNKETVDEKPKKKVLKKKTEKSDSTISETSETSAVESAGPSESETQNVAAVDKE KKQKETDEKQKLEAEIAGKKSTEQKSKLEAEAKLKRAAEEDAAKKQKEKTEAASKKAAAEK LELEKQAQINKAAEADAVKKQNELDEQNKLEATKKLAAEKLKLEEQSAAKSKQAAEEQAKL DAQTKAKAAEKQTGLEKDEKSNKDSGSNETVEEKPKKKVLKKKTEKSDSSISQKSDTSKTVA ESAGSSESETOKVADATSKOKETDKKOKLEAEITAKKSADEKSKLETESKLIKAAEDAAKKO KEKEDKLKLEADVASKKAAAEKLELEKQAQIKKAAEADAVKKQKELAEKQKLESEAATKK AAAEKLKLEEQAQINKAAEADAVKKQKELDEKNKLEANKKSAAEKLKLEEESAAKSKQTVE EQAKLDAQTKEKTAEKQTGLEKDDKSTKDSESKETVDEKPKKKVLKKKTEKSDSSISQKSVT SKTVVESGGPSESETQKVADAARKQKETDEKQKLEAEITAKKSADEKSKLEAESKLKKAAEV EAAKKOKEKDEOLKLDTEAASKKAAAEKLELEKOAOIKKAAEADAVKKEKELAEKOKLESE AATKKAAAEKLKLEEQKKKDAETASIEKQKEQEKLAQEQSKLEVDAKKSAEKQKLESETKS KKTEEAPKESVDEKPKKKVLKKKTEKSDSSISQKSDTAKTVAESAGQSDSETQKVSEADKAH KQKESDEKQKLESEIAAKKSAEQKSKLETEAKTKKVIEDESAKKQKEQEDKKKGDDSAKKQ KDQKEKQKLESEATSKKPTSEKQKDEKTPQEKAKSENETVMTTEPQQLEVKSEPKKSDKTET VEKEVASSTEKSDDSKTKEPKEKKKIIKKKKDTTKPOEASKELSSDESRIDLESDISLSLDTVTE SDDLSTASTIKLQKESDESGIDSRMGQTSEAEDSPFISQPVSATVTEMAGEAKFTVKFSRKPIY VKWMRDDREIRVAYGKASVETTDDSSVLVIKNIDGKDVGNIYAVFDSEYRSAMARLDLRVP

CKITLESSSNAPEIVAGKNLDLSFKISGYPLPTNIELLHNNENLRTRSDVTDFDDSISIRMKRLK LEDSGEIKIIGKNDSSEDQLRIPINVIEVTSKPTSLQVTSTERETVTLTWSLPTELNGSNVNEYLV ERKTVDGGRWRHACTVTDSRAVVDGLFSGTEYVFRVVAVNGAGQSAPSDTIEATTQAEEEI DETVPTSPVEKVKEPVSKKPENTKESEGHKKRDRKESEDHDENNLGKSGKDEFATSGESGTS NONEESAOLNTSFTSTEOHGOTEKOVRKGTRKSLTRSLNIRESDIDADVVEVEYDEOGDDIPS DPTTSGTYAFDKIEEEPARTSGEMAMAEKDSDAMEVRGLNKKLSKKGGKEGTSTEKSSSKTK KQEKSALSVQEMNKSLKKKGEKGEAETAASDFIENADQTGMSIQDLNKSMKKKVESGEATG QINDASNNKDADELSIQDSQQSLKKKSENESVTGEQLDKSQEVEDDKMTIQSLKKSIKKKPES REVSGGKSEKSKEKESDEMSIQQLNKSVKKKPENEAVTQGKSGKSQEQESDKMSIQALNKSM KKKDGVDGVEGNINIGRSDGDQLSVNDIDAELSTSEQVENASQNLGATADSDGDSLSLQTLK KRISKKGIHGEAESKLGEKQSGSDSFTLQDLYEELKAKEDAVEAGAETSNADQSAEKTSLEVR DMKKKMKKQVSGTAENLIGESNRDETSMEIRDLNTQHSNQTGEDESSTFNFGQKDQEQYS MVMKDVSKKLARQNAEEIQSGKLIPTTNEEKTGLALTGKNKNLKKGEENEKTKFEAKHLGS SSASDSLAESTLRSKKTKKGEVEKSELSIDMKNQDKTTLATTLLEDDLAKTTSAEESEAEHLV ALONKEKTSLAMRRKRVSFDSSTKSESIEDVIPDKNRDSDKMSITGIKKKMSQKSESAEAQKN ESPEVKEISSFEEKTLKSKKKSKADRNQGTEANLGDKTIDKDYLSVTDKNQSLEKSEASGQAE KSIKAPNKSKVTTSFADESLTSELDRLMADEEMAEMMFAEEEKAADLLNVMNKNKGLNKSE QEESQEISLKSQSKVKDSDSLSSTDKKIGLKKSDKDQKLGTSKIFGSKDQESVGYEEKTSNFSK QRRGVSDLGSDAMTDQKNVQESQYAEISADDHMSKTGADGEISATRTIVDGSDAAQGSEYA EISKKRKFKRAEOIGEAETSLCDSRENTHDSLSISDVNPELRRSNVEISAFGOIDLTAEEVTSLT DINKDAQLTKKQDENDAKKSVSKNLKAGAKKDSDTLSITSKKDKFGKRQDSREASATVEQQ GEEKVTKNLKGSRGKKEKLGDAGIDVNFENQEEFASTTGDIESIVSEKGHDTYSEKTVKSSKK KSPQTAGAEYGGSESLNASSALSTTDVDAQLKNQEKDGVAESSIGKSNQKDSYSEQELNVNK KKKOAVGAAMNOGSGSTKESDNLAVASVESNLAKDSANOEASLHGLVDNDATSLSOLDSE HRLKKRDDELSAHTKLGKHTQSENIALTETDDSLVKGDSEESAELNIKQQGETAEDKYVESR KKTTLKKKPEOKOVTDTLSAVDGRHDTTSLSVADSGISFDKSMENELAGSGDGTASASVSAK VRGADGNAKTNLISSFEKPGQESKTSKTLSGKQKKQEKSSFAEKNAGFDLSMGEGKNDESVE SSLQKNRDADSLALQGTDLAFSKPSDSSANAHLDMPQRELTLRICQAETVDWSDDSEVEEGT RTSAPGEVKKKKKFIISAISQDGEFSDAESITFDENGVRVEKRRRKKRDPKEYMGAGELAMRI PAFAKKMQYIGCIEGDVVVFTIKVVSDDVPLIRMYRNDFPVANFDKMAFEGFTKGSEHSFNV TINDIRKLDGGKLVFEAKNDYGVDKCTILLDVRDSGSFIEDYSEIHRSAEIQNSVGDVQVKEG ETAKLTGRVDGFPLPELIWIKNGKEIDMMVPSTKYQLDYHSDGEFEARIANCTFEDDDDYSLL VENLAGVDSCNFQVFVDCNEYPDDEHFNRRRRLQRGRRVMEASSDSELDDAKKRKKRRIKR VVERRNPNAPRLTQLIPPRFDKILSDHDAIEGENVVMMVETLGEPEPQVRFYRDGKLIDDGSG DRMEVRHEDEMRKHWLILKDICKDEEAEYACQAINVAGEAWCFSDVVVHMSEESRDDDKS VDEVDDSTVLEEKKDDGDDKSKPKTKKKIIKKKETPESEQVTAAEPEQQKISEVDVQSVAETE VGAKKKPDAEKPTDLSKAKKDSKSKKSDEPEASTEEKSTTEKPTNDKTSKKSAEKKTVKPKK EVTGKPLEAKKPVEDKKDASQPSSSKESSPPTDGKKKKQIPKALFIPDEISSRFGDPSTMHSET NITTTIRGREGSADAKTPLVEPLSASVSMKVESAKEKAEFSFKRRSETPDDKSRKKEGLPPAK KSEKKDEVTAEKOSTEALIESKKKEVDESKISEQOPSDKNKSEVVGVPEKAAGPETKKDVSEI EEVPKKKTIKKKTEKSDSSISQKSNVLKPADDDKSKSDDVTDKSKKTTEDQTKVATDSKLEK AADTTKQIETETVVDDKSKKKVLKKKTEKSDSFISQKSETPPVVEPTKPAESEAQKIAEVNKA KKQKEVDDNLKREAEVAAKKIADEKLKIEAEANIKKTAEVEAAKKQKEKDEQLKLETEVVS KKSAAEKLELEKQAQIKKAAEADAVKKQKELNEKNKLEAAKKSAADKLKLEEESAAKSKK VSEESVKFGEEKKTKAGEKTVOVESEPTSKKTIDTKDVGATEPADETPKKKIIKKKTEKSDSSI SOKSATDSEKVSKOKEODEPTKPAVSETOMVTEADKSKKOKETDEKLKLDAEIAAKTKOEA DEKSKLDAQEKIKKVSEDDAARKEKELNDKLKLESEIATKKASADKLKLEEQAQAKKAAEV

EAAKKOKEKDEOLKLDTEAASKKAAAEKLELEKOAOIKKAAGADAVKKOKELDEKNKLEA NKKSAAGKLKIEEESAAKSKOTVEEQAKLDAQTKAKTAEKOTKLEKDEKSTKESESKETVDE KPKKKVLKKKTEKSDSSISQKSETSKTVVESAGPSESETQKVADAARKQKETDEKQKLEAEIT AKKSADEKSKLEAESKLKKAAEVEAAKKQKEKDEQLKLDTEAASKKAAAEKLELEKQSHIK KAAEVDAVKKQKELEEKQRLESEAATKKADAEKLKLEEQKKKAAEIALIEIQKEQEKLAQEQ SRLEDEAKKSAEKQKLESETKSKQTEEAPKESVDEKPKKKVLKKKTEKSDSSISQKSKSAKST VDAAETLESDFNLVEKKTVQKVEQSPDESTSATIKRDPAQKTEEISKQDDGDEKKTTTDGKPP KPEDSEATPKKRVVKKKTQKSDSVASDASLADVSKLSDDVEEKPKKKVLKKKTEKSDSVISE TSSVDTIKPESVEIPTEKAEQMILHNRFSTDSAVESEPKNAHKDDTEKTTDDMMTRRKSSAIFS DDEQSISSKTSSEGRRRRRTGFASKFASDTLALRGDNVEIEAELLAEDDTVTWKVNGKDAD LNSRCHEMSHTFFRTLIIDEVEPTDSGMEITATCGTESHTTILKVEELPVDFVKYLPRKTSGKE GQEVTISVTLNHPIDISKVVWLKDGKPLEINKDYSIDTVGCSVSLTLRRAKYEDSGKYKVVCD GVDCSTHLSIQGKPVLKNVSETKPVITVDKDDQFSLLVAYDSNPEASFSMTVDGKDLEFDGRS RIDVVDDGLKLTKRGVSKTDAGEYEVKLKNEFGEVAQKFDVKVNDTPSAPGDVSVVKAESD CLHIEWTAPTEDNGAEVTSYVIEKKESGRRKFHKVATVNGKKTSYVVDDLEIETPYIVRIAAV NKFGTGEFIETKPVQTGSPFQVPTVEFPPTIDNVTSTSCSLSWPKPIEDGGSPVYGYDVYKREN EGEWQKMNGEELVFTESFNVRALSSGKEYEFKIEACNEAGLRSNSNVVSKKLTVEGLVPEIIL DMPMVKVLDNDKVEVTWKSDGEKEFVVQYKSDGSSIWASVDIGGPRSESAATSKCIIDGLRE GIPYVFRVAARNQHGTGEFSEPTIPVVVLADDAPRVLKAIKPVKIPKKGELRLECHAAGHPAP EYIWYKDGKEIIPTDENTEIVNEGSMSALIIHELAGEDVGLYKVLVENIHGTAESEAEVGISDV RAHFNSSFSELTEIEEGHDIELTCEVSDEEAVVNWYKDGKKLVASDRVQFYAMARKRTLRIK GSTDADSGVYKCETTDGRSRTEGEVIVNEQEPHILVGPQDAIVKDFGETMVLFCETSKPVRKV KWFKNGVEIWPQMNKAIMENDGKRATLEIKNFDKHDIGAYTASVSEKETSAPAKLVFEVAP NLIIPTEIRDGVTVHAGNEFDFAVEFSGFPIPTIHLTNNGTPLKAIAVVTEYDDSVSVRMKDVT LDNSGTVRVIAESPLGQCIKEIPLKIIDKPSAPCDLQFKEVTEDSVFLSWQPPLETNGAPLTGYV IERKAVDNNRWRPCGOVKPTKLTFVAEDLFCNOVYGFRILAVNEVGESEPCDTVDVLTLESS EPVSESSELFVPKIAILRTPQVTVAVDETKVTLRWEECPETSLYKVERKKVGDSDWLEIANTD RNKFKDRSLTESGEYVYQVTATGIHAVSSPSEETNPVKILVPGSEMPASKTEKKTDAAKSESE QKSAEEIVAEKQVDQSQASESTTEAVEEKKTKKVVKKKVAENKGEETLQEVKEKLKKGKAV EKVQDESRRGSLQASSDNESVTTTSEKRSEAELEKNSEKSAEKKSTSADLEAADKAETEKSET GKETTEKKKKVVKKVAKKGLVKADKSKIELTAGKEGEISAQVAETGVSVEWKKDGKALDA SYTVTSTGGVSTVKIPIVDVNTSGVFTCKVKSSEGDEEEVSIAVTVKLPEVPKVEAEQSIVEVK VGDVAKLSAKISEPASSVNWTKDDKPIKEDGNVKAQLSPDGTAQLTISKTDSAHSGIYKLNVE NDAGKGKVEIALRIKGAAKGAPGIPTGPIVFDDVTESSAEFSWKAPENNGGCEITGYNVERKE SKNKGWKQCGKTKELKFKADGLEEGTDYDVKVSAVNTMGTGSALEGKITTLKKKEETGKQ KSEKSESDEKKSESDKVSELKQIGKPEYVSSTATSIALKWTSDNDEVTYTVQMKEANSKRPW AVVAKEISECSATIAQLKEGTSYLFRVIAQNKTGQTVTSEQSESIECKDTTESKKPAFTNAPTD LTAVKNGKTKITAEFTGHPAPEIHWFKNKKEIFSGKRQWIENIAGATSLTIGEMREDDEGEYKI VVKNTAGSVEHSCKLTMDOLPEINRVDRYASTLVFDKGETVKLRLSFSGRPOPEVIWIDNNG KVIEESRKMKIEKTVLNTVLTINSIDSQDQGEFALKIKNRCGEDKYAIGIQVTDRPAAPGKPAV EDQNVDSVRLRWAAPTNDGGSPVRNYTVEMCTEKGKTWTKAEVTKQAFITLFNLVPGESYR FRVRADNTFGQSEPSDESELVVVKNVSRVVEEPKKKEVKVKEQESVDYERVAKDSEPSEYKT IDIHRLPNDLOAKYIIHEELGKGAYGTVYRATEKATGKTWAAKMVOVRPGVKKENVIHEISM MNQLHHEKLLNLHEAFDMGNEMWLIEEFVSGGELFEKILEDDSLMSEEEVRDYMHQILLGVS HMHKNOIVHLDLKPENILLKAKNSNELKIIDFGLARKLDPKKSVKLLFGTPEFCAPEVVNYOP VGLSTDMWTVGVISYVLLSGLSPFLGDSDEDTLANVSASDWDFDDPSWDDVSDLAKDFICRL MIKDKRKRMSVQDALRHPWITGPLLSAFNDLSEYVKKMQPKLDKSGVPARQKRNFLSLKRW SDDLLPIGRLAKRGAIFRRLTMDGVFERNIAFDTDAAPSVKKQLEDIVANVGDLIATLSCDVD GVPSPKVQWYKDDKELTVPSMKYDSFYNEGLAELTVKNIVESDAGKYTCRATNDLGSIMTH AKLSVKADEKKKKSKTSPAVIEKKKDRKTSKVVVIEEMIDMPPNFHHLLQDDEAKIGEPKIL VVTNTTLPEPTVDWYHNGEHISINDSNYLRKHDKGRYELHILSVDSTDEGKWKAVGKNAFG ECESEAKLTVVIPDGQYAPSFGKQLSDVKCSESDILKLEVNIQANPAPEINWFRNESEIEHSQH HRLQFDDGSGNYSLTIIDAYAEDSGEYKCVAKNKIGKAHTVCCVRIEELLSKRSKKIDGSKAP RFRMQLPTPREVPQGADLTLVCSVSGTPHPNIKWTKDDKPIDMSNKQVRHENGVCTLHIIGA RDDDQGRYVCEAENIHGVAQSFSVVEIKEAVDKDHVRPKFLEPLVNCSTCEGNEMVLECCVT GKPIPTITWYKDGLKLIIENRMLQYTDRKGVSRLNIMNVVMNDDGEYTCEAVNSLGKDFTHC TVKVVDMGLSKTRLTPVRSRSRSRSRSPSVVGGEIQRPPVVTRPLADATVTEGNRELLEVEVD GFPTPTIEWYHDGKLVAESRTLRTYFDGRVAFLKIYEAHEEHNGQYVCKVSNKLGAVETRAI VVVEAPDAAEHVTQMPTFVKKLQDVVLKTAGETATFTCQSYANPAAQVVWLHNGKALQQT KSNYKTRLFDDNTATLVIENVTDELCGTYTAVANNQFGDVHTSAQLTISGSEAKKIAASLPYF IIELKPKINVVEGATLSIQADLNGSPIPEVVWLKDNSELVESDRIQMKCDGVNYQLLVRDVGL EDEGTYTITAENEKGKIRONTEVSVTKSKEVKEKKKKKKKKKDEGKKKPGRPGLPRPSGAS KTEQVTMAFDAPSEGPADSYEVERRCPDQREWVSCGSTKSLELEIKGLTPNTEYIFRVAGKN KQGLGEWSEMTSTLKTASVGQAPQFTISPQSKIIANRDDEFEIAVEFSGTPTPSVKWYKENLQI VPDEKIDVATTSTSSILNLKSQEENGTFNCLIENELGQASASCQVTIFNKPASLQSTPDHSLERN LVPTLQKALNNESAQAGQQIMLTCRISSRSESTVAWFKDDERIESAGRYELSSDKKSNHKLVC HAVOSODTGKYRCVVTNKYGYAESECNVAVEDVTKFIAPSFSATLSDSTAILGHNITLECKVE GSPAPEVSWTKDGERISTTRRIRQTQDENGNCKLSISKAESDDMGVYVCSATSVAGVDSTSS MVMIAKTTGTDSHLVIAQTADEKHEKPRFTRAPPSLIEVNESGQFTLIAKAVGEPKPTVTWLK DGREILRTNRIYHHFVTGDGESHLIAECVVSKTSGIFSCKAENPNGTVIAETQVIVQRMKPANQ LANVAPKFTIPLTDMGIVNGHPTTLSCNVTGSPEPTLEWIYIDDSGHKINLTSSTTDWTECRFG KVAELKSERVLREQRGTYQCIATNSSGQATTQCYLLVGELSDEPAGPPRFVKCLQDTWTPLK ESIEFSVELAGFPTPDLTWYHNEKKINEGKDVKITFPSDTTSVLSIKNVSLASLGMYFVEASNIH GVLRTAGRLNVSDERRKAEPPOFKHVLEPVLAVQPKVAFSEEHPRASSSAATARVKKGAAP MFLQGLEDMDLKAGASAAVAGKLGRKLRPHRSTTNDADKLAKALAQSLRLDEPRASIDSRP ESAANAALDEVRAAINSRNKRVCRPKFMVKPKPRKVLEEYKSLRLKTAISGNPMPQVHWDK EGIILETGNKYSIYNDGDFYYLEVHHVSTFDKGFYNCTAANNEGIITCTSEIDVLPNKEDSAAQ VAKRKSRKEAKAPNFIEVLPGRSQANLNESLCVECSVSAYPCASIIWTRNSVRLLPQADRYTM SYDGECASLKFISVTPGDEGTYACEAVNELGSAVTNMNLQVSGVDPNAAEGIPPLFRFEKIKS VRKVVDGSRVELAAELVQASEPLQIRWLRNKVTIVDSPSFSYSRSENMVFLTIADVFPEDGGE YTVEAKNQSGIARCTMQLDVRNNERSVADEAPRVFDFEPTTRSDPGVSVELRAKVIGHPDPVI SWTKAGOKLNNEEKYMMRNEGDKFILRIANVTRADAGKYELTAINPSGOANAELELTVVOS TKTVGAKPKFNESPISVQTCEKNRAELRASFSGTPAPACRWFYNGNELIDGLDGYTITSSDTNS SLLINSVDKKHFGEYLCTIRNQNGEELANAMILSEVLSMFYSSLFLVVFVDIVAQCHVARLLH FLNEERFVGRNIFA

>DP01947|O65934|#104-230

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QLADAGRVVLVVTHSLTYLDVCDQVLLLAPGGKTAFCGPPTQIGPVMGTTNWADIFSTVAD DPDAAKARYLARTGPTPPPPPVEQPAELGDPAHTSLFRQFSTIARRQLRLIVSDRGYFVFLALL PFIMGALSMSVPGDVGFGFPNPMGDAPNEPGQILVLLNVGAVFMGTALTIRDLIGERAIFRRE QAVGLSTTAYLIAKVCVYTVLAVVQSAIVTVIVLVGKGGPTQGAVALSKPDLELFVDVAVTC VASAMLGLALSAIAKSNEQIMPLLVVAVMSQLVFSGGMIPVTGRVPLDQMSWVTPARWGFA ASAATVDLIKLVPGPLTPKDSHWHHTASAWWFDMAMLVALSVIYVGFVRWKIRLKAC >DP00486|Q9UBT2|#219-237 #291-304 #551-640

MALSRGLPRELAEAVAGGRVLVVGAGGIGCELLKNLVLTGFSHIDLIDLDTIDVSNLNRQFLF QKKHVGRSKAQVAKESVLQFYPKANIVAYHDSIMNPDYNVEFFRQFILVMNALDNRAARNH VNRMCLAADVPLIESGTAGYLGQVTTIKKGVTECYECHPKPTQRTFPGCTIRNTPSEPIHCIVW AKYLFNQLFGEEDADQEVSPDRADPEAAWEPTEAEARARASNEDGDIKRISTKEWAKSTGY DPVKLFTKLFKDDIRYLLTMDKLWRKRKPPVPLDWAEVQSQGEETNASDQQNEPQLGLKDQ QVLDVKSYARLFSKSIETLRVHLAEKGDGAELIWDKDDPSAMDFVTSAANLRMHIFSMNMK SRFDIKSMAGNIIPAIATTNAVIAGLIVLEGLKILSGKIDQCRTIFLNKQPNPRKKLLVPCALDPP NPNCYVCASKPEVTVRLNVHKVTVLTLQDKIVKEKFAMVAPDVQIEDGKGTILISSEEGETEA NNHKKLSEFGIRNGSRLQADDFLQDYTLLINILHSEDLGKDVEFEVVGDAPEKVGPKQAEDA AKSITNGSDDGAQPSTSTAQEQDDVLIVDSDEEDSSNNADVSEEERSRKRKLDEKENLSAKRS RIEOKEELDDVIALD

>DP00833|P22995|#58-83

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>DP01097|P61244-2|#81-102

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>DP00581|P11233|#72-83

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>DP01458|Q9Y3B4|#1-20 #100-125

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>DP00060|P11409|#70-81 #192-229

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>DP00794|P50616|#116-138 #147-345

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>DP00217|P05221|#120-200

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>DP00611|P30291|#1-292 #436-455

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>DP01183|Q9R224|#1-55 #70-128

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>DP00619|Q58667|#160-170

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>DP00563|Q61337|#1-204

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>DP00231|P14859|#1-200 #355-379

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>DP00620|O68FT9|#374-392

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>DP00395|P40136|#578-591 #623-659

MTRNKFIPNKFSIISFSVLLFAISSSQAIEVNAMNEHYTESDIKRNHKTEKNKTEKEKFKDSINN LVKTEFTNETLDKIQQTQDLLKKIPKDVLEIYSELGGEIYFTDIDLVEHKELQDLSEEEKNSMN SRGEKVPFASRFVFEKKRETPKLIINIKDYAINSEQSKEVYYEIGKGISLDIISKDKSLDPEFLNLI KSLSDDSDSSDLLFSQKFKEKLELNNKSIDINFIKENLTEFQHAFSLAFSYYFAPDHRTVLELYA PDMFEYMNKLEKGGFEKISESLKKEGVEKDRIDVLKGEKALKASGLVPEHADAFKKIARELN TYILFRPVNKLATNLIKSGVATKGLNVHGKSSDWGPVAGYIPFDQDLSKKHGQQLAVEKGNL ENKKSITEHEGEIGKIPLKLDHLRIEELKENGIILKGKKEIDNGKKYYLLESNNQVYEFRISDEN NEVQYKTKEGKITVLGEKFNWRNIEVMAKNVEGVLKPLTADYDLFALAPSLTEIKKQIPQKE WDKVVNTPNSLEKQKGVTNLLIKYGIERKPDSTKGTLSNWQKQMLDRLNEAVKYTGYTGG DVVNHGTEQDNEEFPEKDNEIFIINPEGEFILTKNWEMTGRFIEKNITGKDYLYYFNRSYNKIA PGNKAYIEWTDPITKAKINTIPTSAEFIKNLSSIRRSSNVGVYKDSGDKDEFAKKESVKKIAGY LSDYYNSANHIFSQEKKRKISIFRGIQAYNEIENVLKSKQIAPEYKNYFQYLKERITNQVQLLLT HQKSNIEFKLLYKQLNFTENETDNFEVFQKIIDEK

>DP01942|P50553|#1-236

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>DP01552|P33763|#38-52

 ${\tt METPLEKALTTMVTTFHKYSGREGSKLTLSRKELKELIKKELCLGEMKESSIDDLMKSLDKNSDQEIDFKEYSVFLTMLCMAYNDFFLEDNK}$

>DP00940|Q62627|#1-332

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>DP00616|P02788|#38-59

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QLNELQGLKSCHTGLRRTAGWNVPIGTLRPFLNWTGPPEPIEAAVARFFSASCVPGADKGQFP NLCRLCAGTGENKCAFSSQEPYFSYSGAFKCLRDGAGDVAFIRESTVFEDLSDEAERDEYELL CPDNTRKPVDKFKDCHLARVPSHAVVARSVNGKEDAIWNLLRQAQEKFGKDKSPKFQLFGS PSGQKDLLFKDSAIGFSRVPPRIDSGLYLGSGYFTAIQNLRKSEEEVAARRARVVWCAVGEQE LRKCNQWSGLSEGSVTCSSASTTEDCIALVLKGEADAMSLDGGYVYTAGKCGLVPVLAENY KSQQSSDPDPNCVDRPVEGYLAVAVVRRSDTSLTWNSVKGKKSCHTAVDRTAGWNIPMGLL FNQTGSCKFDEYFSQSCAPGSDPRSNLCALCIGDEQGENKCVPNSNERYYGYTGAFRCLAEN AGDVAFVKDVTVLQNTDGNNNEAWAKDLKLADFALLCLDGKRKPVTEARSCHLAMAPNH AVVSRMDKVERLKQVLLHQQAKFGRNGSDCPDKFCLFQSETKNLLFNDNTECLARLHGKTT YEKYLGPOYVAGITNLKKCSTSPLLEACEFLRK

>DP00810|P0A882|#2-16 #63-92

MAQQSPYSAAMAEQRHQEWLRFVDLLKNAYQNDLHLPLLNLMLTPDEREALGTRVRIVEEL LRGEMSQRELKNELGAGIATITRGSNSLKAAPVELRQWLEEVLLKSD >DP01174|O43474|#1-130

MRQPPGESDMAVSDALLPSFSTFASGPAGREKTLRQAGAPNNRWREELSHMKRLPPVLPGRP YDLAAATVATDLESGGAGAACGGSNLAPLPRRETEEFNDLLDLDFILSNSLTHPPESVAATVS SSASASSSSSPSSSGPASAPSTCSFTYPIRAGNDPGVAPGGTGGGLLYGRESAPPPTAPFNLADI NDVSPSGGFVAELLRPELDPVYIPPQQPQPPGGGLMGKFVLKASLSAPGSEYGSPSVISVSKGS PDGSHPVVVAPYNGGPPRTCPKIKQEAVSSCTHLGAGPPLSNGHRPAAHDFPLGRQLPSRTTP TLGLEEVLSSRDCHPALPLPPGFHPHPGPNYPSFLPDQMQPQVPPLHYQGQSRGFVARAGEPC VCWPHFGTHGMMLTPPSSPLELMPPGSCMPEEPKPKRGRRSWPRKRTATHTCDYAGCGKTY TKSSHLKAHLRTHTGEKPYHCDWDGCGWKFARSDELTRHYRKHTGHRPFQCQKCDRAFSRS DHLALHMKRHF

>DP00014|P05371|#22-41 #66-97 #386-447

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>DP01456|Q01081|#38-152

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MISTTDYPTVETTTTAEELYAEYISAPASSMSPAAIAEHLQQNQITFEIPSAHDLRHIDALNSFN ALLQRIGNAAVSYDPAPPSGWSPDGSISTEQLSKSVVLDLADLRDRSEESGESSWWSQIFGDA DMHVIINYLWIGVVSSLVILSLVFILFSCYFYRKFRTWKKCNKDIRAQIHAASDSYSSHLVGCD ASRLLLHQQMQHPHHRSSEAGFYQIESPPCYTIATGLPSYDEALHHQPRHFAYGMKFVYPSLA AVHHHHCISNWEKQEPLNKLQKCKLSAAAAVEEDKADSSSSTSASASPSSSESSNLATATPA ICINMPSGRQDEEVDNSDSDSAIAVAVAVAQSLQPAAPADDDCASLVVVVAA

>DP00565|P63098|#1-14 #81-86 #158-169

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KDTQLQQIVDKTIINADKDGDGRISFEEFCAVVGGLDIHKKMVVDV >DP01465|Q8IW19|#399-420 #450-511

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>DP00427|P0AFG8|#1-55 #401-413 #541-557

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ARNEQDGGDLVYFQGHISPGVYARAFLEGRLTQEQLDNFRQEVHGNGLSSYPHPKLMPEFW
QFPTVSMGLGPIGAIYQAKFLKYLEHRGLKDTSKQTVYAFLGDGEMDEPESKGAITIATREKL
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FKKAQETKGKATVILAHTIKGYGMGDAAEGKNIAHQVKKMNMDGVRHIRDRFNVPVSDADI
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VRALNVMLKNKSIKDRLVPIIADEARTFGMEGLFRQIGIYSPNGQQYTPQDREQVAYYKEDE
KGQILQEGINELGAGCSWLAAATSYSTNNLPMIPFYIYYSMFGFQRIGDLCWAAGDQQARGF
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YYYITTLNENYHMPAMPEGAEEGIRKGIYKLETIEGSKGKVQLLGSGSILRHVREAAEILAKD
YGVGSDVYSVTSFTELARDGQDCERWNMLHPLETPRVPYIAQVMNDAPAVASTDYMKLFA
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AIAKFNIDADKVNPRLA

>DP01964|P22303|#572-583

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YVADKEFHAPLIIDENGVHELVKNGI

>DP00812|Q97QZ2|#1-63

MIGKNIKSLRKTHDLTQLEFARIVGISRNSLSRYENGTSSVSTELIDIICQKFNVSYVDIVGEDK MLNPVEDYELTLKIEIVKERGANLLSRLYRYQDSQGISIDDESNPWILMSDDLSDLIHTNIYLV ETFDEIERYSGYLDGIERMLEISEKRMVA

>DP00845|P23632|#95-107

MKYLAAYALVGLSGGTPSKSAVEAVLKAAGVPVDPSRVDALFAEFAGKDFDTVCTEGKSKL VGGVTRPNAATASAPTAAAAASSGAAAPAAAAEEEEDDDMGFGLFD

>DP00472|P50542|#1-324

MAMRELVEAECGGANPLMKLAGHFTQDKALRQEGLRPGPWPPGAPASEAASKPLGVASED ELVAEFLQDQNAPLVSRAPQTFKMDDLLAEMQQIEQSNFRQAPQRAPGVADLALSENWAQE FLAAGDAVDVTQDYNETDWSQEFISEVTDPLSVSPARWAEEYLEQSEEKLWLGEPEGTATDR WYDEYHPEEDLQHTASDFVAKVDDPKLANSEFLKFVRQIGEGQVSLESGAGSGRAQAEQWA AEFIQQQGTSDAWVDQFTRPVNTSALDMEFERAKSAIESDVDFWDKLQAELEEMAKRDAEA HPWLSDYDDLTSATYDKGYQFEEENPLRDHPQPFEEGLRRLQEGDLPNAVLLFEAAVQQDPK HMEAWQYLGTTQAENEQELLAISALRRCLELKPDNQTALMALAVSFTNESLQRQACETLRD WLRYTPAYAHLVTPAEEGAGGAGLGPSKRILGSLLSDSLFLEVKELFLAAVRLDPTSIDPDVQ CGLGVLFNLSGEYDKAVDCFTAALSVRPNDYLLWNKLGATLANGNQSEEAVAAYRRALEL QPGYIRSRYNLGISCINLGAHREAVEHFLEALNMQRKSRGPRGEGGAMSENIWSTLRLALSM LGQSDAYGAADARDLSTLLTMFGLPQ

>DP00934|P61925|#1-5 #26-32 #53-76

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>DP00473|Q49AN0|#490-593

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FGKERDAAIMKMAKEAGVEVVTENSHTLYDLDRIIELNGQKPPLTYKRFQAIISRMELPKKPV
GLVTSQQMESCRAEIQENHDETYGVPSLEELGFPTEGLGPAVWQGGETEALARLDKHLERKA
WVANYERPRMNANSLLASPTGLSPYLRFGCLSCRLFYYRLWDLYKKVKRNSTPPLSLFGQLL
WREFFYTAATNNPRFDRMEGNPICIQIPWDRNPEALAKWAEGKTGFPWIDAIMTQLRQEGWI
HHLARHAVACFLTRGDLWVSWESGVRVFDELLLDADFSVNAGSWMWLSCSAFFQQFFHCY
CPVGFGRRTDPSGDYIRRYLPKLKAFPSRYIYEPWNAPESIQKAAKCIIGVDYPRPIVNHAETS
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>DP00613|Q22472|#1-378

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>DP00023|P14061|#191-199 #289-328

MARTVVLITGCSSGIGLHLAVRLASDPSQSFKVYATLRDLKTQGRLWEAARALACPPGSLET LQLDVRDSKSVAAARERVTEGRVDVLVCNAGLGLLGPLEALGEDAVASVLDVNVVGTVRM LQAFLPDMKRRGSGRVLVTGSVGGLMGLPFNDVYCASKFALEGLCESLAVLLLPFGVHLSLI ECGPVHTAFMEKVLGSPEEVLDRTDIHTFHRFYQYLAHSKQVFREAAQNPEEVAEVFLTALR

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>DP01780|P21736|#1-54

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>DP00573|P03305|#852-890

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>DP01451|O9UBU9|#96-117 #102-118

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>DP00887|P21246|#33-46 #142-168

 $\label{eq:mapping} MQAQQYQQRRKFAAAFLAFIFILAAVDTAEAGKKEKPEKKVKKSDCGEWQWSVCVPTSG\\ DCGLGTREGTRTGAECKQTMKTQRCKIPCNWKKQFGAECKYQFQAWGECDLNTALKTRTG\\ SLKRALHNAECQKTVTISKPCGKLTKPKPQAESKKKKKEGKKQEKMLD$

>DP00016|P38936|#1-164

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>DP00897|Q57565|#303-318 #339-364 #430-451

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>DP00241|P35612|#409-726

MSEETVPEAASPPPPQGQPYFDRFSEDDPEYMRLRNRAADLRQDFNLMEQKKRVTMILQSPS FREELEGLIQEQMKKGNNSSNIWALRQIADFMASTSHAVFPTSSMNVSMMTPINDLHTADSL NLAKGERLMRCKISSVYRLLDLYGWAQLSDTYVTLRVSKEQDHFLISPKGVSCSEVTASSLIK VNILGEVVEKGSSCFPVDTTGFCLHSAIYAARPDVRCIIHLHTPATAAVSAMKWGLLPVSHNA LLVGDMAYYDFNGEMEQEADRINLQKCLGPTCKILVLRNHGVVALGDTVEEAFYKIFHLQA ACEIQVSALSSAGGVENLILLEQEKHRPHEVGSVQWAGSTFGPMQKSRLGEHEFEALMRMLD NLGYRTGYTYRHPFVQEKTKHKSEVEIPATVTAFVFEEDGAPVPALRQHAQKQQKEKTRWL NTPNTYLRVNVADEVQRSMGSPRPKTTWMKADEVEKSSSGMPIRIENPNQFVPLYTDPQEVL EMRNKIREQNRQDVKSAGPQSQLLASVIAEKSRSPSTESQLMSKGDEDTKDDSEETVPNPFSQ LTDQELEEYKKEVERKKLELDGEKETAPEEPGSPAKSAPASPVQSPAKEAETKSPLVSPSKSLE EGTKKTETSKAATTEPETTQPEGVVVNGREEEQTAEEILSKGLSQMTTSADTDVDTSKDKTES VTSGPMSPEGSPSKSPSKKKKKKFRTPSFLKKSKKKEKVES

>DP00428|P53350|#488-507

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>DP00607|Q16595|#1-41 #42-86

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>DP01087|Q1PAB4|#1-101

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>DP00799|P9WNK3|#1-16 #76-96

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>DP01181|P56621|#2-30

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>DP00424|P04325|#34-50 #62-116

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>DP00686|O9IH62|#236-245 #579-590

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>DP00788|P38801|#118-184

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>DP00892|O31818|#41-77

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>DP01874|O95149|#72-91 #288-348

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>DP00941|Q93009|#54-62 #107-111

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>DP01073|Q61548|#623-680

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VSEFLKVAEQVGIDKGDIPDLTQAPSSLMETLEQHLNTLEGKKPGNNEGSGAPSPLSKSSPATT VTSPNSTPAKTIDTSPPVDIFATASAAAPVSSAKPSSDLLDLQPDFSGAAAGAAAPVVPPSGGA TAWGDLLGEDSLAALSSVPCEAPISDPFAPEPSPPTTTTEPASASASTTTAVTAVTTEVDLFGD AFAASPGEAPAASEGATAPATPAPVAAALDACSGNDPFAPSEGSAEAAPELDLFAMKPPETSA PVVTPTASTAPPVPATAPSPAPTAVAATAATTTAAAAATTTATTSAAAATTAAAPPALDIFGD LFDSAPEVAAAPKPDAAPSIDLFGTDAFSSPPRGASPVPESSLTADLLSVDAFAAPSPASTASPA KAESSGVIDLFGDAFGSGASETQPAPQAVSSSSASADLLAGFGGSFMAPSTTPVTPAQNNLLQ PSFEAAFGTTPSTSSSSSFDPSVFDGLGDLLMPTMAPSGQPAPVSMVPPSPAMAASKGLGSDL DSSLASLVGNLGISGTTSKKGDLQWNAGEKKLTGGANWQPKVTPATWSAGVPPQGTVPPTS SVPPGAGAPSVGQPGAGFGMPPSGTGMTMMSQQPVMFAQPMMRPPFGAAAVPGTQLSPSPT PATQSPKKPPAKDPLADLNIKDFL

>DP00840|P46065|#1-18 #46-51 #74-108 #119-129 #143-150 #177-183 #187-205

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>DP00505|P04234|#54-62 #127-171

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>DP00609|O81283|#1-839

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>DP00464|Q13485|#273-284 #297-306 #470-478

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>DP00397|Q9ES89|#275-285

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>DP00015|P61926|#1-76

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>DP00236|P02686|#134-304

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>DP01186|P03086|#41-71

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>DP00617|P60896|#1-6 #26-36 #64-70

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>DP00418|P78504|#1094-1218

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>DP00555|O16143|#1-134

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>DP00793|P05387|#63-115

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>DP00567|Q07932|#57-76

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>DP00626|P0AG11|#1-139

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>DP00936|O88998|#339-352

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>DP01473|Q96GU1|#20-130

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>DP01080|Q9C1S9|#44-96

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>DP00075|P11387|#1-214 #636-712

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>DP01876|P52926|#1-109

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>DP01455|Q96DE5|#1-51

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>DP00629|O07097|#401-524

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>DP00407|P07363|#124-158 #228-257

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>DP01377|J7M799|#90-190

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>DP00399|P50097|#102-221 #314-324 #413-431 #484-503

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>DP00842|P12506|#1-86

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>DP00953|Q9H832|#1-99 #327-354

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>DP01872|O95630|#228-241

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>DP00844|P01096|#1-18

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>DP00074|P03372|#1-184 #221-237 #253-262

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>DP00889|P9WF19|#1-11

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