#### >DM validata9

CGVGFIANLRGKPDHTLVEQALKALGCMEHRGGCSADNDSGDGAGVMTAIPRELLAQWFNTRNLP MPDGDRLGVGMVFLPQEPSAREVARAYVEEVVRLEKLTVLGWREVPVNSDVLGIQAKNNQPHIEQIL VTCPEGCAGDELDRRLYIARSIIGKKLAEDFYVCSFSCRTIVYKGMVRSIILGEFYLDLKNPGYTSNFAVY HRRFSTNTMPKWPLAOPMRLLGHNGEINTLLGNINWMAAREKELEVSGWTKAELEALTPIVNOANS DSYNLDSALELLVRTGRSPLEAAMILVPEAYKNQPALKDYPEISDFHDYYSGLQEPWDGPALLVFSDG KIVGAGLDRNGLRPARYCITKDDYIVLGSEAGVVDLPEVDIVEKGRLAPGOMIAVDLAEOKILKNYOIK QQAAQKYPYGEWIKIQRQTVASDSFAEKTLFNDAQTVLQQQAAFGYTAEDVEMVVVPMASQGKEP TFCMGDDTPLAVLSHKPRLLYDYFKORFAOVTNPPIDPLRENLVMSLAMFLGKRGNLLEPKAESARTI KLRSPLVNEVELQAIKTGQLQVAEVSTLYDLDGVNSLEDALTNLVKTAIATVQAGAEILVLTDRPNGAI LTENOSFIPPLLAVGAVHHHLIRAGLRLKASLIVDTAOCWSTHHFACLVGYGASAICPYLALESVROW WLDEKTOKLMENGRLDRIDLPTALKNYROSVEAGLFKILSKMGISLLASYHGAOIFEAIGLGAELVEYAF AGTTSRVGGLTIADVAGEVMVFHGMAFPEMAKKLENFGFVNYRPGGEYHMNSPEMSKSLHKAVAA YKVGGNGNNGEAYDHYELYRQYLKDRPVTALRDLLDFNADQPAISLEEVESVESIVKRFCTGGMSLG ALSREAHETLAIAMNRLGAKSNSGEGGEDVVRYLTLDDVDSEGNSPTLPHLHGLQNGDTANSAIKQI ASGRFGVTPEYLMSGKOLEIKMAOGAKPGEGGOLPGKKVSEYIAMLRRSKPGVTLISPPPHHDIYSIED LAQLIYDLHQINPEAQVSVKLVAEIGIGTIAAGVAKANADIIQISGHDGGTGASPLSSIKHAGSPWELG VTEVHRVLMENQLRDRVLLRADGGLKTGWDVVMAALMGAEEYGFGSIAMIAEGCIMARVCHTNNC PVGVATQQERLRQRFKGVPGQVVNFFYFIAEEVRSLLAHLGYRSLDDIIGRTDLLKVRSDVQLSKTQNL TLDCLLNLPDTKQNRQWLNHEPVHSNGPVLDDDILADPDIQEAINHQTTATKTYRLVNTDRTVGTRL SGAIAKKYGNNGFEGNITLNFQGAAGQSFGAFNLDGMTLHLQGEANDYVGKGMNGGEIVIVPHPQ ASFAPEDNVIIGNTCLYGATGGNLYANGRAGERFAVRNSVGKAVIEGAGDHCCEYMTGGVIVVLGPV GRNVGAGMTGGLAYFLDEVGDLPEKINPEIITLORITASKGEEQLKSLITAHVEHTGSPKGKAILANWS DYLGKFWQAVPPSEKDSPEANNDVSLTGEKTLTSV

>DM validata10

MSDLANSEKYYDEDPYGFEDESAPITAEDSWAVISAFFREKGLVSQQLDSFNQFVDYTLQDIICEDSTLI LEQLAQHTTESDNISRKYEISFGKIYVTKPMVNESDGVTHALYPQEARLRNLTYSSGLFVDVKKRTYEAI DVPGRELKYELIAEESEDDSESGKVFIGRLPIMLRSKNCYLSEATESDLYKLKECPFDMGGYFIINGSEKVL IAQERSAGNIVQVFKKAAPSPISHVAEIRSALEKGSRFISTLQVKLYGREGSSARTIKATLPYIKQDIPIVIIF RALGIIPDGEILEHICYDVNDWQMLEMLKPCVEDGFVIQDRETALDFIGRRGTALGIKKEKRIQYAKDIL QKEFLPHITQLEGFESRKAFFLGYMINRLLLCALDRKDQDDRDHFGKKRLDLAGPLLAQLFKTLFKKLTK DIFRYMORTVEEAHDFNMKLAINAKTITSGLKYALATGNWGEOKKAMSSRAGVSOVLNRYTYSSTLS HLRRTNTPIGRDGKLAKPRQLHNTHWGLVCPAETPEGQACGLVKNLSLMSCISVGTDPMPIITFLSEW GMEPLEDYVPHOSPDATRVFVNGVWHGVHRNPARLMETLRTLRRKGDINPEVSMIRDIREKELKIFT DAGRVYRPLFIVEDDESLGHKELKVRKGHIAKLMATEYODIEGGFEDVEEYTWSSLLNEGLVEYIDAEEE ESILIAMOPEDLEPAEANEENDLDVDPAKRIRVSHHATTFTHCEIHPSMILGVAASIIPFPDHNQSPRNT YQSAMGKQAMGVFLTNYNVRMDTMANILYYPQKPLGTTRAMEYLKFRELPAGQNAIVAIACYSGY NQEDSMIMNQSSIDRGLFRSLFFRSYMDQEKKYGMSITETFEKPQRTNTLRMKHGTYDKLDDDGLIA PGVRVSGEDVIIGKTTPISPDEEELGORTAYHSKRDASTPLRSTENGIVDOVLVTTNODGLKFVKVRVR TTKIPQIGDKFASRHGOKGTIGITYRREDMPFTAEGIVPDLIINPHAIPSRMTVAHLIECLLSKVAALSGN EGDASPFTDITVEGISKLLREHGYOSRGFEVMYNGHTGKKLMAQIFFGPTYYORLRHMVDDKIHARA RGPMQVLTRQPVEGRSRDGGLRFGEMERDCMIAHGAASFLKERLMEASDAFRVHICGICGLMTVIAK LNHNQFECKGCDNKIDIYQIHIPYAAKLLFQELMAMNITPRLYTDRSRDF 

### >DM\_validata12

MAPVLSKDVADIESILALNPRTQSHAALHSTLAKKLDKKHWKRNPDKNCFHCEKLENNFDDIKHTTL GERGALREAMRCLKCADAPCQKSCPTHLDIKSFITSISNKNYYGAAKMIFSDNPLGLTCGMVCPTSDL CVGGCNLYATEEGSINIGGLQQFASEVFKAMNIPQIRNPCLPSQEKMPEAYSAKIALLGAGPASISCAS FLARLGYSDITIFEKQEYVGGLSTSEIPQFRLPYDVVNFEIELMKDLGVKIICGKSLSENEITLNTLKEEGYK AAFIGIGLPEPKTDDIFQGLTQDQGFYTSKDFLPLVAKSSKAGMCACHSPLPSIRGAVIVLGAGDTAFD CATSALRCGARRVFLVFRKGFVNIRAVPEEVELAKEEKCEFLPFLSPRKVIVKGGRIVAVOFVRTEQDET

GKWNEDEDQIVHLKADVVISAFGSVLRDPKVKEALSPIKFNRWDLPEVDPETMQTSEPWVFAGGDIV GMANTTVESVNDGKOASWYIHKYIOAOYGASVSAKPELPLFYTPVDLVDISVEMAGLKFINPFGLASA APTTSSSMIRRAFEAGWGFALTKTFSLDKDIVTNVSPRIVRGTTSGPMYGPGQSSFLNIELISEKTAAYW COSVTELKADFPDNIVIASIMCSYNKNDWMELSRKAEASGADALELNLSCPHGMGERGMGLACGQ DPELVRNICRWVROAVOIPFFAKLTPNVTDIVSIARAAKEGGADGVTATNTVSGLMGLKADGTPWPA VGAGKRTTYGGVSGTAIRPIALRAVTTIARALPGFPILATGGIDSAESGLQFLHSGASVLQVCSAVQNQ DFTVIQDYCTGLKALLYLKSIEELQGWDGQSPGTESHQKGKPVPRIAELMGKKLPNFGPYLEQRKKIIAE EKMRLKEQNAAFPPLERKPFIPKKPIPAIKDVIGKALQYLGTFGELSNIEQVVAVIDEEMCINCGKCYMT CNDSGYOAIOFDPETHLPTVTDTCTGCTLCLSVCPIIDCIRMVSRTTPYEPKRGLPLAVNPVC 

### >DM\_validata13

MPIFRFTALAMTLGLLSAPYNAMAATSNPAFDPKNLMQSEIYHFAQNNPLADFSSDKNSILTLSDKRS IMGNQSLLWKWKGGSSFTLHKKLIVPTDKEASKAWGRSSTPVFSFWLYNEKPIDGYLTIDFGEKLISTSE AQAGFKVKLDFTGWRAVGVSLNNDLENREMTLNATNTSSDGTQDSIGRSLGAKVDSIRFKAPSNVS QGEIYIDRIMFSVDDARYQWSDYQVKTRLSEPEIQFHNVKPQLPVTPENLAAIDLIRQRLINEFVGGEK ETNLALEENISKLKSDFDALNIHTLANGGTQGRHLITDKQIIIYQPENLNSQDKQLFDNYVILGNYTTLM FNISRAYVLEKDPTQKAQLKQMYLLMTKHLLDQGFVKGSALVTTHHWGYSSRWWYISTLLMSDALK EANLQTQVYDSLLWYSREFKSSFDMKVSADSSDLDYFNTLSRQHLALLLLEPDDQKRINLVNTFSHYIT GALTQVPPGGKDGLRPDGTAWRHEGNYPGYSFPAFKNASQLIYLLRDTPFSVGESGWNNLKKAMVS AWIYSNPEVGLPLAGRHPFNSPSLKSVAQGYYWLAMSAKSSPDKTLASIYLAISDKTQNESTAIFGETIT PASLPQGFYAFNGGAFGIHRWQDKMVTLKAYNTNVWSSEIYNKDNRYGRYQSHGVAQIVSNGSQL SQGYQQEGWDWNRMEGATTIHLPLKDLDSPKPHTLMQRGERGFSGTSSLEGQYGMMAFNLIYPA NLERFDPNFTAKKSVLAADNHLIFIGSNINSSDKNKNVETTLFQHAITPTLNTLWINGQKIENMPYQTT LQQGDWLIDSNGNGYLITQAEKVNVSRQHQVSAENKNRQPTEGNFSSAWIDHSTRPKDASYEYMV FLDATPEKMGEMAQKFRENNGLYQVLRKDKDVHIILDKLSNVTGYAFYQPASIEDKWIKKVNKPAIV MTHRQKDTLIVSAVTPDLNMTRQKAATPVTINVTINGKWQSADKNSEVKYQVSGDNTELTFTSYFGI POFIKI SPI P

### >DM validata14

FNLDVDSPAEYSGPEGSYFGFAVDFFVPSASSRMFLLVGAPKANTTQPGIVEGGQVLKCDWSSTRRC QPIEFDATGNRDYAKDDPLEFKSHQWFGASVRSKQDKILACAPLYHWRTEMKQEREPVGTCFLQDG TKTVEYAPCRSQDIDADGQGFCQGGFSIDFTKADRVLLGGPGSFYWQGQLISDQVAEIVSKYDPNVY SIKYNNQLATRTAQAIFDDSYLGYSVAVGDFNGDGIDDFVSGVPRAARTLGMVYIYDGKNMSSLYNF TGEQMAAYFGFSVAATDINGDDYADVFIGAPLFMDRGSDGKLQEVGQVSVSLQRASGDFQTTKLN GFEVFARFGSAIAPLGDLDQDGFNDIAIAAPYGGEDKKGIVYIFNGRSTGLNAVPSQILEGQWAARSM PPSFGYSMKGATDIDKNGYPDLIVGAFGVDRAILYRARPVITVNAGLEVYPSILNQDNKTCSLPGTALK VSCFNVRFCLKADGKGVLPRKLNFQVELLLDKLKQKGAIRRALFLYSRSPSHSKNMTISRGGLMQCEEL IAYLRDESEFRDKLTPITIFMEYRLDYRTAADTTGLQPILNQFTPANISRQAHILLDCGEDNVCKPKLEVS VDSDQKKIYIGDDNPLTLIVKAQNQGEGAYEAELIVSIPLQADFIGVVRNNEALARLSCAFKTENQTRQ VVCDLGNPMKAGTQLLAGLRFSVHQQSEMDTSVKFDLQIQSSNLFDKVSPVVSHKVDLAVLAAVEIR GVSSPDHVFLPIPNWEHKENPETEEDVGPVVQHIYELRNNGPSSFSKAMLHLQWPYKYNNNTLLYIL HYDIDGPMNCTSDMEINPLRIKISSLQTTEKNDTVAGQGERDHLITKRDLALSEGDIHTLGCGVAQCL KIVCQVGRLDRGKSAILYVKSLLWTETFMNKENQNHSYSLKSSASFNVIEFPYKNLPIEDITNSTLVTTN VTWGIOP

#### >DM validata15

MAGRNWNASWIWGGQEESPRNEWRCFRGSFDAPASVEGPAMLHITADSRYVLFVNGEQVGRGPV RSWPKEQFYDSYDIGGQLRPGVRNTIAVLVLHFGVSNFYYLRGRGGLIAEIEADGRTLAATDAAWRTE RLGGQRSNSPRMACQQGFGEVIDARELAEDWALPAFDDGGWAQARSIGPAGTAPWTSLVPRDIPF LTEEKLYPASIQSLSRVKAPKYAAALDLRNQMVPESVNHANPVSYCGYVATILTLETSGVVTLGFPTGV RGSGVWVDGVLQTEWTGVQPERYYSLNLAAGEHLVLVDITSSDHGGSSHFAIDSEAAFTLRSPAGD NGVPLATIGTFDQSEYIDHRPGRRMQTDHPDYRALPEAAPTAAALEAFASWVKPFEPSLYTEENVFGS NVWRTLAERRAVPRSVLNAILPVPEPGVLPVFEDGDCELVIDLGAERSGFIGFELEAPAGTIIDAYGVEY MREGYTQHTYGLDNTFRYICREGRQSYVSPVRRGFRYLFLTVRGNSAPVKLHEIYIRQSTYPVAEQGSF RCSDALLNATWEISRHTTRLCMEDTFVDCPSYEQVFWVGDSRNEALVNYYVFGETEIVERCLNLVPGS ADETPLYLDQVPSAWSSVIPNWTFFWILACREYAAHTGNEAFAARIWPAVKHTLTHYLEHIDDSGLLN MAGWNLLDWAPIDQPNEGIVTHQNLFLVKALRDSRALAAAAGATEEADAFAARADLLAETINAVL WDEEKRAYIDCIHADGRRSDVYSMQTQVVAYLCGVAQGEREAVIEGYLSSPPPAFVQIGSPFMSFFYY EALEKAGRQTLMLDDIRRNYGQMLRYDATTCWEMYPNFAENRSNPDMLTRSHCHAWSAAPGYFL GSSILGVKRGADGWRTVDIAPQPCDLTWAEGVVPLPQGGHIAVSWEFVSAGKLKLRIEAPEDIEVNVT LPEGIEGEVTQVKYMS

>DM\_validata16

MGSSHHHHHHSGLEVLFQGPAMATKKVHIISHSHWDREWYMAYEQHHMRLINLIDDLLEVFQTD PDFHSFHLDGQTIILDDYLKVRPEREPEIRQAIASGKLRIGPFYILQDDFLTSSESNVRNMLIGKEDCDR WGASVPLGYFPDTFGNMGQTPQLMLKAGLQAAAFGRGIRPTGFNNQVDTSEKYSSQFSEISWQGP DNSRILGLLFANWYSNGNEIPTTEAEARLFWDKKLADAERFASTKHLLMMNGCDHQPVQLDVTKAI ALANQLYPDYEFVHSCFEDYLADLADDLPENLSTVQGEITSQETDGWYTLANTASARIYLKQANTRVS RQLENITEPLAAMAYEVTSTYPHDQLRYAWKTLMQNHPHDSICGCSVDSVHREMMTRFEKAYEVG HYLAKEAAKQIADAIDTRDFPMDSQPFVLFNTSGHSKTSVAELSLTWKKYHFGQRFPKEVYQEAQEYL ARLSQSFQIIDTSGQVRPEAEILGTSIAFDYDLPKRSFREPYFAIKVRLRLPITLPAMSWKTLALKLGNETT PSETVSLYDDSNQCLENGFLKVMIQTDGRLTITDKQSGLIYQDLLRFEDCGDIGNEYISRQPNHDQPF YADQGTIKLNIISNTAQVAELEIQQTFAIPISADKLLQAEMEAVIDITERQARRSQEKAELTLTTLIRMEK NNPRLQFTTRFDNQMTNHRLRVLFPTHLKTDHHLADSIFETVKRPNHPDATFWKNPSNPQHQECFV SLFDGENGVTIGNYGLNEYEILPDTNTIAITLLRSVGEMGDWGYFPTPEAQCLGKHSLSYSFESITKQTQ FASYWRAQEGQVPVITTQTNQHEGTLAAEYSYLTGTNDQVALTAFKRRLADNALITRSYNLSNDKTC DFSLSLPNYNAKVTNLLEKDSKQSTPSQLGKAEILTLAWKKQ

#### >DM validata17

MIAAQLLAYYFTELKDDQVKKIDKYLYAMRLSDETLIDIMTRFRKEMKNGLSRDFNPTATVKMLPTFVR SIPDGSEKGDFIALDLGGSSFRILRVQVNHEKNQNVHMESEVYDTPENIVHGSGSQLFDHVAECLGDF MEKRKIKDKKLPVGFTFSFPCQQSKIDEAILITWTKRFKASGVEGADVVKLLNKAIKKRGDYDANIVAVV NDTVGTMMTCGYDDQHCEVGLIIGTGTNACYMEELRHIDLVEGDEGRMCINTEWGAFGDDGSLEDI RTEFDRAIDAYSLNPGKQLFEKMVSGMYLGELVRLILVKMAKEGLLFEGRITPELLTRGKFNTSDVSAIEK NKEGLHNAKEILTRLGVEPSDDDCVSVQHVCTIVSFRSANLVAATLGAILNRLRDNKGTPRLRTTVGV DGSLYKTHPQYSRRFHKTLRRLVPDSDVRFLLSESGSGKGAAMVTAVAYRLAEQHRQIEETLAHFHLT KDMLLEVKKRMRAEMELGLRKQTHNNAVVKMLPSFVRRTPDGTENGDFLALDLGGANFRVLLVKIRS GKKRTVEMHNKIYAIPIEIMQGTGEELFDHIVSCISDFLDYMGIKGPRMPLGFTFSFPCQQTSLDAGILIT WTKGFKATDCVGHDVVTLLRDAIKRREEFDLDVVAVVNDTVGTMMTCAYEEPTCEVGLIVGTGSNA CYMEEMKNVEMVEGDQGQMCINMEWGAFGDNGCLDDIRTHYDRLVDEYSLNAGKQRYEKMISG MYLGEIVRNILIDFTKKGFLFRGQISETLKTRGIFETKFLSQIESDRLALLQVRAILQQLGLNSTCDDSILVK TVCGVVSRRAAQLCGAGMAAVVDKIRENRGLDRLNVTVGVDGTLYKLHPHFSRIMHQTVKELSPKC NVSFLLSEDGSGKGAALITAVGVRLRTEASS

### >DM validata22

MLEEYRKHVAERAAEGIAPKPLDANQMAALVELLKNPPAGEEEFLLDLLTNRVPPGVDEAAYVKAGFL AAIAKGEAKSPLLTPEKAIELLGTMQGGYNIHPLIDALDDAKLAPIAAKALSHTLLMFDNFYDVEEKAKA GNEYAKQVMQSWADAEWFLNRPALAEKLTVTVFKVTGETNTDDLSPAPDAWSRPDIPLHALAMLK NAREGIEPDQPGVVGPIKQIEALQQKGFPLAYVGDVVGTGSSRKSATNSVLWFMGDDIPHVPNKRG GGLCLGGKIAPIFFNTMEDAGALPIEVDVSNLNMGDVIDVYPYKGEVRNHETGELLATFELKTDVLIDE VRAGGRIPLIIGRGLTTKAREALGLPHSDVFRQAKDVAESDRGFSLAQKMVGRACGVKGIRPGAYCEP KMTSVGSQDTTGPMTRDELKDLACLGFSADLVMQSFCHTAAYPKPVDVNTHHTLPDFIMNRGGVS

LRPGDGVIHSWLNRMLLPDTVGTGGDSHTRFPIGISFPAGSGLVAFAAATGVMPLDMPESVLVRFKG KMQPGITLRDLVHAIPLYAIKQGLLTVEKKGKKNIFSGRILEIEGLPDLKVEQAFELTDASAERSAAGCTIK LNKEPIIEYLNSNIVLLKWMIAEGYGDRRTLERRIQGMEKWLANPELLEADADAEYAAVIDIDLADIKEPI LCAPNDPDDARPLSAVQGEKIDEVFIGSCMTNIGHFRAAGKLLDAHKGQLPTRLWVAPPTRMDAAQ LTEEGYYSVFGKSGARIEIPGCSLCMGNQARVADGATVVSTSTRNFPNRLGTGANVFLASAELAAVAA LIGKLPTPEEYQTYVAQVDKTAVDTYRYLNFNQLSQYTEKADGVIFQTAV

### >DM\_validata23

MSAIENFDAHTPMMQQYLRLKAQHPEILLFYRMGDFYELFYDDAKRASQLLDISLTKRGASAGEPIPM AGIPYHAVENYLAKLVNQGESVAICEQIGDPATSKGPVERKVVRIVTPGTISDEALLQERQDNLLAAIW QDSKGFGYATLDISSGRFRLSEPADRETMAAELQRTNPAELLYAEDFAEMSLIEGRRGLRRRPLWEFEI DTARQQLNLQFGTRDLVGFGVENAPRGLCAAGCLLQYAKDTQRTTLPHIRSITMEREQDSIIMDAAT RRNLEITQNLAGGAENTLASVLDCTVTPMGSRMLKRWLHMPVRDTRVLLERQQTIGALQDFTAGLQ PVLRQVGDLERILARLALRTARPRDLARMRHAFQQLPELRAQLETVDSAPVQALREKMGEFAELRDLL ERAIIDTPPVLVRDGGVIASGYNEELDEWRALADGATDYLERLEVRERERTGLDTLKVGFNAVHGYYIQ ISRGQSHLAPINYMRRQTLKNAERYIIPELKEYEDKVLTSKGKALALEKQLYEELFDLLLPHLEALQQSAS ALAELDVLVNLAERAYTLNYTCPTFIDKPGIRITEGRHPVVEQVLNEPFIANPLNLSPQRRMLIITGPNM GGKSTYMRQTALIALMAYIGSYVPAQKVEIGPIDRIFTRVGAADDLASGRSTFMVEMTETANILHNAT EYSLVLMDEIGAGTSTYDGLSLAWACAENLANKIKALTLFATHYFELTQLPEKMEGVANVHLDALEHG DTIAFMHSVQDGAASKSYGLAVAALAGVPKEVIKRARQKLRELESIS

#### >DM validata25

MSRRRHSDENDGGOPHKRRKTSDANETEDHLESLICKVGEKSACSLESNLEGLAGVLEADLPNYKSKI

LRLLCTVARLLPEKLTIYTTLVGLLNARNYNFGGEFVEAMIRQLKESLKANNYNEAVYLVRFLSDLVNCH VIAAPSMVAMFENFVSVTQEEDVPQVRRDWYVYAFLSSLPWVGKELYEKKDAEMDRIFANTESYLKR RQKTHVPMLQVWTADKPHPQEEYLDCLWAQIQKLKKDRWQERHILRPYLAFDSILCEALQHNLPPF TPPPHTEDSVYPMPRVIFRMFDYTDDPEGPVMPGSHSVERFVIEENLHCIIKSHWKERKTCAAQLVSY PGKNKIPLNYHIVEVIFAELFQLPAPPHIDVMYTTLLIELCKLQPGSLPQVLAQATEMLYMRLDTMNTT CVDRFINWFSHHLSNFQFRWSWEDWSDCLSQDPESPKPKFVREVLEKCMRLSYHQRILDIVPPTFSA LCPANPTCIYKYGDESSNSLPGHSVALCLAVAFKSKATNDEIFSILKDVPNPNQDDDDDEGFSFNPLKI EVFVQTLLHLAAKSFSHSFSALAKFHEVFKTLAESDEGKLHVLRVMFEVWRNHPQMIAVLVDKMIRTQ IVDCAAVANWIFSSELSRDFTRLFVWEILHSTIRKMNKHVLKIQKELEEAKEKLARQHKRRSDDDDRSS DRKDGVLEEQIERLQEKVESAQSEQKNLFLVIFQRFIMILTEHLVRCETDGTSVLTPWYKNCIERLQQIFL OHHOIIQOYMVTLENLLFTAELDPHILAVFOQFCALQA

>DM validata28

ASMTGGQQMGRGSGSEFMENETHYAEAVIDNGAFGTRTIRFETGRLARQAAGSAVAYLDDDTMVL SATTASKNPKDQLDFFPLTVDVEERMYAAGKIPGSFFRREGRPSEDAILTCRLIDRPLRPSFKKGLRNEI QVVATIMALNPDHLYDVVAINAASASTQLAGLPFSGPIGGVRVALIRGQWVAFPTHTELEDAVFDMV VAGRVLEDGDVAIMMVEAEATEKTIQLVKDGAEAPTEEVVAAGLDAAKPFIKVLCKAQADLAAKAAK PTGEFPVFLDYQDDVLEALSAAVRPELSAALTIAGKQDREAELDRVKALAAEKLLPEFEGREKEISAAYR ALTKSLVRERVIAEKKRIDGRGVTDIRTLAAEVEAIPRVHGSALFERGETQILGVTTLNMLRMEQQLDTL SPVTRKRYMHNYNFPPYSVGETGRVGSPKRREIGHGALAERAIVPVLPTREEFPYAIRQVSEALGSNGS TSMGSVCASTMSLLNAGVPLKAPVAGIAMGLISQEINGETHYVALTDILGAEDAFGDMDFKVAGTKE FVTALQLDTKLDGIPASVLAAALKQARDARLHILDVMMEAIDTPDEMSPNAPRIITVKIPVDKIGEVIGP KRQMINQIQEDTGAEITIEDDGTIYIGAADGPAAEAARATINGIANPTSPEVGERILGSVVKTTTFGAFV SLLPGKDGLLHISQIRKLAGGKRVENVEDVLGVGQKVQVEIAEIDSRGKLSLIPVIEGEEAASDEKKDDA EO

### >DM\_validata29

MTISPPEREPKVRVVVDNDPVPTSFEKWAKPGHFDRTLARGPQTTTWIWNLHALAHDFDTHTSDLE DISRKIFSAHFGHLAVVFIWLSGMYFHGAKFSNYEAWLADPTGIKPSAQVVWPIVGQGILNGDVGGG FHGIQITSGLFQLWRASGITNEFQLYCTAIGGLVMAGLMLFAGWFHYHKRAPKLEWFQNVESMLNH HLAGLLGLGSLAWAGHQIHVSLPINKLLDAGVAAKDIPLPHEFILNPSLMAELYPKVDWGFFSGVIPFF TFNWAAYSDFLTFNGGLNPVTGGLWLSDTAHHHLAIAVLFIIAGHMYRTNWGIGHSLKEILEAHKGPF TGAGHKGLYEVLTTSWHAQLAINLAMMGSLSIIVAQHMYAMPPYPYLATDYPTQLSLFTHHMWIGG FLVVGGAAHGAIFMVRDYDPAMNQNNVLDRVLRHRDAIISHLNWVCIFLGFHSFGLYVHNDTMRA FGRPQDMFSDTGIQLQPVFAQWVQNLHTLAPGGTAPNAAATASVAFGGDVVAVGGKVAMMPIVL GTADFMVHHIHAFTIHVTVLILLKGVLFARSSRLIPDKANLGFRFPCDGPGRGGTCQVSGWDHVFLGL FWMYNCISVVIFHFSWKMQSDVWGTVAPDGTVSHITGGNFAQSAITINGWLRDFLWAQASQVIGS YGSALSAYGLLFLGAHFIWAFSLMFLFSGRGYWQELIESIVWAHNKLKVAPAIQPRALSIIQGRAVGVA HYLLGGIATTWAFFLARIISVG

### >DM validata30

MTSTGRFTLPSEENFAEKTKELAELWGADAIRNSDGTHLDEAVLALGKKIYNAYFPTRAHNEWITLHM DETPQVYLLTDRILAESDTVDIPLMESFFAEQLKPNRDADPHKYWEVVDRTTGEVVDSANWTLDADE DTVHVSGVAAWHEYTVSFLAYIIWDPVEMYNHLTNDWGDKEHEIPFDIYHPATRKFVFDTFEQWLK DSPQTDVVRFTTFFYQFTLLFDEKRREKVVDWFGCACTVSPRALDDFEAKYGYRLRPEDFVDGGAYN SAWRVPRKAQRDWIDFLSGFVRENVKQLADMSHAAGKEAMMFLGDQWIGTEPYKDGFDELGLDA VVGSIGDGTTTRMIADIPGVKYTEGRFLPYFFPDTFYEGNDPSIEGLDNWRKARRAILRSPISRMGYGG YLSLAAKFPKFVDTVTHIANEFRDIHDRTGGVAAEGELNVAILNSWGKMRSWMAFTVAHALPNKQT YSYYGILESLSGMRVNVRFISFDDVLAHGIDSDIDVIINGGPVDTAFTGGDVWTNPKLVETVRAWVRG GGAFVGVGEPSSAPRFQTGRFFQLADVIGVDEERYQTLSVDKYFPPVVPDHFITADVPVDPAAREAW EQAGYRIPLSGCGGGQSIKPLGGIDFGEPVLNTYPVNENVTLLRADGGQVQLATNDYGKGRGVYISG LPYSAANARLLERVLFYASHNEDKYAAWSSSNPECEVAHFPEQGLYCVINNTDQPQKTTVTLADGTT EDFDLPDSGIAWREA

#### >DM validata31

MSLTKVSSLGYPRLGENREWKKLIEAYWAGKVSKNDLFAGAKELRLDFLKKQLNAGLDLIPVGDFSLY DHILDLSVQFNIIPKRFAKEPIDIDLYFAIARGNKENVASSMKKWFNTNYHYIVPEWSKQRPKLNNNRL LDLYLEAREVVGDKAKPVITGPITYVALSTGVEDFTAAVKSLLPLYKQVFTELVKAGASYIQVDEPIFVTD EGKDYLQAAKAVYAYFAKEVPDAKFIFQTYFEGLIDSQVLSQLPVDAFGLDFVYGLEENLEAIKTGAFK GKEIFAGVIDGRNIWSSDFVKTSALLETIEEQSAALTIQPSCSLLHVPVTTKNETDLDPVLRNGLAFADE KLTEVKRLAEHLDGREDPAYDLHIAHFDALQAADFRNVKLEDLSRVATKRPSDFAKRRDIQQEKLHLP LLPTTTIGSFPQSREIRRTRLAWKRGDISDAEYKQFIQAEIERWIRIQEDLDLDVLVHGEFERVDMVEFFG QKLAGFTTTKFGWVQSYGSRAVKPPIIYGDVQHLEPITVEETVYAQSLTDRPVKGMLTGPITITNWSFE RTDIPRDQLFNQIGLAIKDEIKLLENAGIAIIQVDEAALREGLPLRKSKQKAYLDDAVHAFHIATSSVKDE TQIHTHMCYSKFDEIIDAIRALDADVISIETSRSHGDIIESFETAVYPLGIGLGVYDIHSPRVPTKEEVVANI ERPLRQLSPTQFWVNPDCGLKTRQEPETIAALKVLVAATKEVRQKLGNEG

#### >DM validata33

RSPGTLPRKAGVFSDLSNQELKAVHSFLWSKKELRLQPSSTTTMAKNTVFLIEMLLPKKYHVLRFLDKG ERHPVREARAVIFFGDQEHPNVTEFAVGPLPGPCYMRALSPRPGYQSSWASRPISTAEYALLYHTLQE ATKPLHQFFLNTTGFSFQDCHDRCLAFTDVAPRGVASGQRRSWLIIQRYVEGYFLHPTGLELLVDHGS TDAGHWAVEQVWYNGKFYGSPEELARKYADGEVDVVVLEDPLPGGKGHDSTEEPPLFSSHKPRGDF PSPIHVSGPRLVQPHGPRFRLEGNAVLYGGWSFAFRLRSSSGLQVLNVHFGGERIAYEVSVQEAVALY GGHTPAGMQTKYLDVGWGLGSVTHELAPGIDCPETATFLDTFHYYDADDPVHYPRALCLFEMPTGV PLRRHFNSNFKGGFNFYAGLKGQVLVLRTTSTVYNYDYIWDFIFYPNGVMEAKMHATGYVHATFYTP EGLRHGTRLHTHLIGNIHTHLVHYRVDLDVAGTKNSFQTLQMKLENITNPWSPRHRVVQPTLEQTQY SWERQAAFRFKRKLPKYLLFTSPQENPWGHKRSYRLQIHSMADQVLPPGWQEEQAITWARYPLAVT KYRESELCSSSIYHQNDPWDPPVVFEQFLHNNENIENEDLVAWVTVGFLHIPHSEDIPNTATPGNSVG FLLRPFNFFPEDPSLASRDTVIVWPRDNGPNYVORWIPEDRDCSMPPPFSYNGTYRPV

#### >DM\_validata34

MADTQYILPNDIGVSSLDCREAFRLLSPTERLYAYHLSRAAWYGGLAVLLQTSPEAPYIYALLSRLFRAQ DPDQLHQHALAEGLTEEEYQAFLVYAAGVYSNMGNYKSFGDTKFVPNLPKEKLERVILGSEAAQQHP EEVRGLWQTCGELMFSLEPRLRHLGLGKEGITTYFSGNCTMEDAKLAQDFLDSQNLSAYNTRLFKEV DGEGKPYYEVRLASVLGSEPSLDSEVTSKLKSYEFRGSPFQVTRGDYAPILQKVVEQLEKAKAYAANSH QGQMLAQYIESFTQGSIEAHKRGSRFWIQDKGPIVESYIGFIESYRDPFGSRGEFEGFVAVVNKAMSAK FERLVASAEQLLKELPWPPTFEKDKFLTPDFTSLDVLTFAGSGIPAGINIPNYDDLRQTEGFKNVSLGNV LAVAYATQREKLTFLEEDDKDLYILWKGPSFDVQVGLHELLGHGSGKLFVQDEKGAFNFDQETVINPE TGEQIQSWYRSGETWDSKFSTIASSYEECRAESVGLYLCLHPQVLEIFGFEGADAEDVIYVNWLNMVR AGLLALEFYTPEAFNWRQAHMQARFVILRVLLEAGEGLVTITPTTGSDGRPDARVRLDRSKIRSVGKPA LERFLRRLQVLKSTGDVAGGRALYEGYATVTDAPPECFLTLRDTVLLRKESRKLIVQPNTRLEGSDVQLL EYEASAAGLIRSFSERFPEDGPELEEILTQLATADARFW

#### >DM validata35

MRVDELRVDERIKSTLKERGIESFYPPQAEALKSGILEGKNALISIPTASGKTLIAEIAMVHRILTQGGKAV YIVPLKALAEEKFQEFQDWEKIGLRVAMATGDYDSKDEWLGKYDIIIATAEKFDSLLRHGSSWIKDVKIL VADEIHLIGSRDRGATLEVILAHMLGKAQIIGLSATIGNPEELAEWLNAELIVSDWRPVKLRRGVFYQGF VTWEDGSIDRFSSWEELVYDAIRKKKGALIFVNMRRKAERVALELSKKVKSLLTKPEIRALNELADSLEE NPTNEKLAKAIRGGVAFHHAGLGRDERVLVEENFRKGIIKAVVATPTLSAGINTPAFRVIIRDIWRYSDF GMERIPIIEVHQMLGRAGRPKYDEVGEGIIVSTSDDPREVMNHYIFGKPEKLFSQLSNESNLRSQVLALI ATFGYSTVEEILKFISNTFYAYQRKDTYSLEEKIRNILYFLLENEFIEISLEDKIRPLSLGIRTAKLYIDPYTAKM FKDKMEEVVKDPNPIGIFHLISLTPDITPFNYSKREFERLEEEYYEFKDRLYFDDPYISGYDPYLERKFFRAF KTALVLLAWINEVPEGEIVEKYSVEPGDIYRIVETAEWLVYSLKEIAKVLGAYEIVDYLETLRVRVKYGIREE LIPLMQLPLVGRRRARALYNSGFRSIEDISQARPEELLKIEGIGVKTVEAIFKFLGKNVKISEKPRKSTLDYFLKS

#### >DM\_validata36

VSNAKLLGGSPYSPFRIGLEGVWTPEVLKARASVIGKPIGESYKRILAKLQRIHNSNILDERQGLMHELM ELIDLYEESQPSSERLNAFRELRTQLEKALYLPEMEALKKQILQIPNKGSGAARFLLRTAMNEMAGKTSE STADLIRFALQDTVISAPFRGYAGAIPEAIDFPVKYVIEDISVFDKIQTNYWELPAYESWNEGSNSALLPG LLRESQSKGMLSKCRIIENSLYIGHSYEEMFYSISPYSNQVGGPYELYPFTFFSMLQEVQGDLGFEQAFA TRNFFNTLVSDRLSLMENTMLLTESFDYTPWDAIYGDINYDEQFAAMSINERIEKCMNTYRGVAFQN SSKSIDFFLNNLTTFIDNGLTEIAISDLPYDIVQQEISQFLQGSNEWKTLDAMLFNLDKGDINGAFRKLL QSAKDNNIKFRAIGHSDNSVPPFNNPYKSLYYKGNIIAEAIEKLDREGQKFVVFADSSLLNSTPGTGRP MPGLVQYLKIPATVVDSDGAWQFLPDVASSRVPIEVTELENWQVLTPPQGKILGLKQFKLTAGFPTEQ SRLPLLENSVSEDLREELMQKIDAIKNDVKMNSLVCMEAGSCDSVSPKVAARLKDMGLEAGMGASIT WWRREGGMEFSHQMHTTASFKFAGKEFAVDASHLQFVHDQLDTTILILPVDDWALEIAQRNRAINP FVEYVSKTGNMLALFMPPLFTKPRLTRAL

### >DM validata37

QQKLTSPDNNLVMTFQVDSKGAPTYELTYKNKVVIKPSTLGLELKKEDNTRTDFDWVDRRDLTKLDS KTNLYDGFEVKDTQTATFDETWQPVWGEEKEIRNHYNELAVTLYQPMNDRSIVIRFRLFNDGLGFRY EFPQQKSLNYFVIKEEHSQFGMNGDHIAFWIPGDYDTQEYDYTISRLSEIRGLMKEAITPNSSQTPFSQ TGVQTALMMKTDDGLYINLHEAALVDYSCMHLNLDDKNMVFESWLTPDAKGDKGYMQTPCNTP WRTIIVSDDARNILASRITLNLNEPCKIADAASWVKPVKYIGVWWDMITGKGSWAYTDELTSVKLGET DYSKTKPNGKHSANTANVKRYIDFAAAHGFDAVLVEGWNEGWEDWFGNSKDYVFDFVTPYPDFDV KEIHRYAARKGIKMMMHHETSASVRNYERHMDKAYQFMADNGYNSVKSGYVGNIIPRGEHHYGQ WMNNHYLYAVKKAADYKIMVNAHEATRPTGICRTYPNLIGNESARGTEYESFGGNKVYHTTILPFTRL VGGPMDYTPGIFETHCNKMNPANNSQVRSTIARQLALYVTMYSPLQMAADIPENYERFMDAFQFIK DVALDWDETNYLEAEPGEYITIARKAKDTDDWYVGCTAGENGHTSKLVFDFLTPGKQYIATVYADAK DADWKENPQAYTIKKGILTNKSKLNLHAANGGGYAISIKEVKDKSEAKGLKRL

#### >DM\_validata38

AVEPKEDTITVTAAPAPQESAWGPAATIAARQSATGTKTDTPIQKVPQSISVVTAEEMALHQPKSVKE ALSYTPGVSVGTRGASNTYDHLIIRGFAAEGQSQNNYLNGLKLQGNFYNDAVIDPYMLERAEIMRGP VSVLYGKSSPGGLLNMVSKRPTTEPLKEVQFKAGTDSLFQTGFDFSDSLDDDGVYSYRLTGLARSANA QQKGSEEQRYAIAPAFTWRPDDKTNFTFLSYFQNEPETGYYGWLPKEGTVEPLPNGKRLPTDFNEGA KNNTYSRNEKMVGYSFDHEFNDTFTVRQNLRFAENKTSQNSVYGYGVCSDPANAYSKQCAALAPA DKGHYLARKYVVDDEKLQNFSVDTQLQSKFATGDIDHTLLTGVDFMRMRNDINAWFGYDDSVPLL NLYNPVNTDFDFNAKDPANSGPYRILNKQKQTGVYVQDQAQWDKVLVTLGGRYDWADQESLNR VAGTTDKRDDKQFTWRGGVNYLFDNGVTPYFSYSESFEPSSQVGKDGNIFAPSKGKQYEVGVKYVPE DRPIVVTGAVYNLTKTNNLMADPEGSFFSVEGGEIRARGVEIEAKRPLSASVNVVGSYTYTDAEYTTDT TYKGNTPAQVPKHMASLWADYTFFDGPLSGLTLGTGGRYTGSSYGDPANSFKVGSYTVVDALVRYD LARVGMAGSNVALHVNNLFDREYVASCFNTYGCFWGAERQVVATATFRF

### >DM validata39

DGNNLNNPVLLLDTFDFGPREDNWFFYPGGNIGLYCPYSSKGAPEEDSAMVFVSNEVGEHSITTRDL SVNENTIIQFEINVGCSTDSSSADPVRLEFSRDFGATWHLLLPLCYHSSSLVSSLCSTEHHPSSTYYAGT TQGWRREVVHFGKLHLCGSVRFRWYQGFYPAGSQPVTWAIDNVYIGPQCEEMCYGHGSCINGTKC ICDPGYSGPTCKISTKNPDFLKDDFEGQLESDRFLLMSGGKPSRKCGILSSGNNLFFNEDGLRMLVTRD LDLSHARFVQFFMRLGCGKGVPDPRSQPVLLQYSLNGGLSWSLLQEFLFSNSSNVGRYIALEMPLKA RSGSTRLRWWQPSENGHFYSPWVIDQILIGGNISGNTVLEDDFSTLDSRKWLLHPGGTKMPVCGSTG DALVFIEKASTRYVVTTDIAVNEDSFLQIDFAASCSVTDSCYAIELEYSVDLGLSWHPLVRDCLPTNVEC SRYHLQRILVSDTFNKWTRITLPLPSYTRSQATRFRWHQPAPFDKQQTWAIDNVYIGDGCLDMCSG HGRCVQGSCVCDEQWGGLYCDEPETSLPTQLKDNFNRAPSNQNWLTVSGGKLSTVCGAVASGLAL HFSGGCSRLLVTVDLNLTNAEFIQFYFMYGCLITPSNRNQGVLLEYSVNGGITWNLLMEIFYDQYSKP GFVNILLPPDAKEIATRFRWWQPRHDGLDONDWAIDNVLI

#### >DM\_validata40

#### >DM validata44

MASKDKEINNTIDAIEDKNFKQVYKDSSYISKSDNGEVEMTERPIKIYNSLGVKDINIQDRKIKKVSKNK KRVDAQYKIKTNYGNIDRNVQFNFVKEDGMWKLDWDHSVIIPGMQKDQSIHIENLKSERGKILDRN NVELANTGTAYEIGIVPKNVSKKDYKAIAKELSISEDYIKQQMDQNWVQDDTFVPLKTVKKMDEYLSD FAKKFHLTTNETESRNYPLEKATSHLLGYVGPINSEELKQKEYKGYKDDAVIGKKGLEKLYDKKLQHED GYRVTIVDDNSNTIAHTLIEKKKKDGKDIQLTIDAKVQKSIYNNMKNDYGSGTAIHPQTGELLALVSTP SYDVYPFMYGMSNEEYNKLTEDKKEPLLNKFQITTSPGSTQKILTAMIGLNNKTLDDKTSYKIDGKGW QKDKSWGGYNVTRYEVVNGNIDLKQAIESSDNIFFARVALELGSKKFEKGMKKLGVGEDIPSDYPFYN AQISNKNLDNEILLADSGYGQGEILINPVQILSIYSALENNGNINAPHLLKDTKNKVWKKNIISKENINLL TDGMQQVVNKTHKEDIYRSYANLIGKSGTAELKMKQGETGRQIGWFISYDKDNPNMMMAINVKDV ODKGMASYNAKISGKVYDELYENGNKKYDIDE

# >DM validata45

PSTIQTASPFRLASAGEISEVQGILRTAGLLGPEKRIAYLGVLDPARGAGSEAEDRRFRVFIHDVSGARP QEVTVSVTNGTVISAVELDTAATGELPVLEEEFEVVEQLLATDERWLKALAARNLDVSKVRVAPLSAG VFEYAEERGRRILRGLAFVQDFPEDSAWAHPVDGLVAYVDVVSKEVTRVIDTGVFPVPAEHGNYTDP ELTGPLRTTQKPISITQPEGPSFTVTGGNHIEWEKWSLDVGFDVREGVVLHNIAFRDGDRLRPIINRASI AEMVVPYGDPSPIRSWQNYFDTGEYLVGQYANSLELGCDCLGDITYLSPVISDAFGNPREIRNGICMH EEDWGILAKHSDLWSGINYTRRNRRMVISFFTTIGNYDYGFYWYLYLDGTIEFEAKATGVVFTSAFPEG GSDNISQLAPGLGAPFHQHIFSARLDMAIDGFTNRVEEEDVVRQTMGPGNERGNAFSRKRTVLTRES EAVREADARTGRTWIISNPESKNRLNEPVGYKLHAHNQPTLLADPGSSIARRAAFATKDLWVTRYAD DERYPTGDFVNQHSGGAGLPSYIAQDRDIDGQDIVVWHTFGLTHFPRVEDWPIMPVDTVGFKLRPE GFFDRSPVLDVPANPSQSGSHCHGSNWSHPQFEK

>DM validata46

DDLPYRFGLGKADITGEAAEVGMMGYSSLEQKTAGIHMRQWARAFVIEEAASGRRLVYVNTDLGMIF QAVHLKVLARLKAKYPGVYDENNVMLAATHTHSGPGGFSHYAMYNLSVLGFQEKTFNAIVDGIVRSI ERAQARLQPGRLFYGSGELRNASRNRSLLSHLKNPDIAGYEDGIDPQMSVLSFVDANGELAGAISWF PVHSTSMTNANHLISPDNKGYASYHWEHDVSRKSGFVAAFAQTNAGNLSPNLNLKPGSGPFDNEF DNTREIGLRQFAKAYEIAGQAQEEVLGELDSRFRFVDFTRLPIRPEFTDGQPRQLCTAAIGTSLAAGSTE DGPGPLGLEEGNNPFLSALGGLLTGVPPQELVQCQAEKTILADTGNKKPYPWTPTVLPIQMFRIGQLE LLGAPAEFTVMAGVRIRRAVQAASEAAGIRHVVFNGYANAYASYVTTREEYAAQEYEGGSTLYGPWT QAAYQQLFVDMAVALRERLPVETSAIAPDLSCCQMNFQTGVVADDPYIGKSFGDVLQQPRESYRIG DKVTVAFVTGHPKNDLRTEKTFLEVVNIGKDGKQTPVTVATDNDWDTQYRWERVGISASKATISWSI PPGTEPGHYYIRHYGNAKNFWTOKISEIGGSTRSFEVLGTTP

#### >DM validata48

MKLSDLISRWIDVEPSKNAQIILRDRYFMKDLDGNYLETKWEDVARRVARVVATAELLNPSYKKNEKL DRIKEWEDIFFRVLKARLFIPNSPTLFNAGLGVKHDLLWKPIDQMTLEDYEEIYRSRNHLHMLSACFVV PVGDSIEEIFEAVKEYALITKVGGGVGSNFSELRPKGSFVAGTHGKASGPVSFMHVFNSAISVVKQGSR RRGALMGILNINHPDIEEFIDAKKENTGEAVLNFFNLSVGFPMDKKEILKLYEEDGELELSHPRSTIRKKV KIRELFRKIATNAWKSGDPGLAFLGEMNKYYPLYPHRKINSTNPCGEIGLSDYEACNLGSIDVAKFYNN GFVDLEALQELVQIAVRFLDNVIDVNVFPIDKITKAVKESRRLGLGIMGFADLLYKLEIPYNSQEARDFA ANLMAFIALHAHRTSYELGKEKGNFPLLEISRYRTEDNFVPFAMGMSNYDDEIREVMKMTKEFRRNV ALLTIAPTGSISNIADTSSGLEPNFLLAYTRFVTKEDGTKEPLLYVNQVLREKLNPEILKRIEKELIEKGSLKD IPDVPEKIKKVFVVALDIDPMDHLLMQDAFQRYVDNNISKTINMPQSATVDDVLNVYLEALRTNVRGI TVYRDGSLQTQVLTKALKT

# >DM validata49

MVYYPKKYELYKADEVPTEVVETDILIIGGGFSGCGAAYEAAYWAKLGGLKVTLVEKAAVERSGAVAQ GLSAINTYIDLTGRSERONTLEDYVRYVTLDMMGLAREDLVADYARHVDGTVHLFEKWGLPIWKTPD

GKYVREGQWQIMIHGESYKPIIAEAAKMAVGEENIYERVFIFELLKDKNDPNAVAGAVGFSVREPKFYV FKAKAVILATGGATLLFRPRSTGEAAGRTWYAIFDTGSGYYMGLKAGAMLTQFEHRFIPFRFKDGYGP VGAWFLFFKCKAKNAYGEEYIKTRAAELEKYKPYGAAQPIPTPLRNHQVMLEIMDGNQPIYMHTEEAL AELAGGDKKKLKHIYEEAFEDFLDMTVSQALLWACQNIDPQEQPSEAAPAEPYIMGSHSGEAGFWV CGPEDLMPEEYAKLFPLKYNRMTTVKGLFAIGDCAGANPHKFSSGSFTEGRIAAKAAVRFILEQKPNPE IDDAVVEELKKKAYAPMERFMQYKDLSTADDVNPEYILPWQGLVRLQKIMDEYAAGIATIYKTNEKML QRALELLAFLKEDLEKLAARDLHELMRAWELVHRVWTAEAHVRHMLFRKETRWPGYYYRTDYPELN DEEWKCFVCSKYDAEKDEWTFEKVPYVQVIEWSF

# >DM\_validata50

MRPVFPLILSAVLFLSCFFGARQTEASASKRAIDANQIVNRMSLDEKLGQMLMPDFRNWQKEGESSP QALTKMNDEVASLVKKYQFGGIILFAENVKTTKQTVQLTDDYQKASPKIPLMLSIDQEGGIVTRLGEGT NFPGNMALGAARSRINAYQTGSIIGKELSALGINTDFSPVVDINNNPDNPVIGVRSFSSNRELTSRLGL YTMKGLQRQDIASALKHFPGHGDTDVDSHYGLPLVSHGQERLREVELYPFQKAIDAGADMVMTAH VQFPAFDDTTYKSKLDGSDILVPATLSKKVMTGLLRQEMGFNGVIVTDALNMKAIADHFGQEEAVV MAVKAGVDIALMPASVTSLKEEQKFARVIQALKEAVKNGDIPEQQINNSVERIISLKIKRGMYPARNSD STKEKIAKAKKIVGSKQHLKAEKKLAEKAVTVLKNEQHTLPFKPKKGSRILIVAPYEEQTASIEQTIHDLIK RKKIKPVSLSKMNFASQVFKTEHEKQVKEADYIITGSYVVKNDPVVNDGVIDDTISDSSKWATVFPRAV MKAALQHNKPFVLMSLRNPYDAANFEEAKALIAVYGFKGYANGRYLQPNIPAGVMAIFGQAKPKGT LPVDIPSVTKPGNTLYPLGYGLNIKTGRPL

### >DM\_validata51

MQFHLNGFRPGNPLIAPASPLAPAHTEAVPSQVDVLIVGCGPAGLTLAAQLAAFPDIRTCIVEQKEGP MELGQADGIACRTMEMFEAFEFADSILKEACWINDVTFWKPDPGQPGRIARHGRVQDTEDGLSEFP HVILNQARVHDHYLERMRNSPSRLEPHYARRVLDVKVDHGAADYPVTVTLERCDAAHAGQIETVQA RYVVGCDGARSNVRRAIGRQLVGDSANQAWGVMDVLAVTDFPDVRYKVAIQSEQGNVLIIPREGG HLVRFYVEMDKLDADERVASRNITVEQLIATAQRVLHPYKLEVKNVPWWSVYEIGQRICAKYDDVVD AVATPDSPLPRVFIAGDACHTHSPKAGQGMNFSMQDSFNLGWKLAAVLRKQCAPELLHTYSSERQ

VVAQQLIDFDREWAKMFSDPAKEGGQGGVDPKEFQKYFEQHGRFTAGVGTHYAPSLLTGQAKHQA LASGFTVGMRFHSAPVVRVCDAKPVQLGHCGKADGRWRLYAFAAQNDLAQPESGLLALCRFLEGD AASPLRRFTPAGQDIDSIFDLRAVFPQAYTEVALETLPALLLPPKGQLGMIDYEKVFSPDLKNAGQDIFE LRGIDRQQGALVVVRPDQYVAQVLPLGDHAALSAYFESFMRA

#### >DM validata52

SSTDQGTNPADTDDLTPTTLSLAGDFPKATEEQWEREVEKVLNRGRPPEKQLTFAECLKRLTVHTVDG IDIVPMYRPKDAPKKLGYPGVAPFTRGTTVRNGDMDAWDVRALHEDPDEKFTRKAILEGLERGVTSLL LRVDPDAIAPEHLDEVLSDVLLEMTKVEVFSRYDQGAAAEALVSVYERSDKPAKDLALNLGLDPIGFA ALQGTEPDLTVLGDWVRRLAKFSPDSRAVTIDANIYHNAGAGDVAELAWALATGAEYVRALVEQGF TATEAFDTINFRVTATHDQFLTIARLRALREAWARIGEVFGVDEDKRGARQNAITSWRELTREDPYVNI LRGSIATFSASVGGAESITTLPFTQALGLPEDDFPLRIARNTGIVLAEEVNIGRVNDPAGGSYYVESLTRS LADAAWKEFQEVEKLGGMSKAVMTEHVTKVLDACNAERAKRLANRKQPITAVSEFPMIGARSIETKP FPAAPARKGLAWHRDSEVFEQLMDRSTSVSERPKVFLACLGTRRDFGGREGFSSPVWHIAGIDTPQV EGGTTAEIVEAFKKSGAQVADLCSSAKVYAQQGLEVAKALKAAGAKALYLSGAFKEFGDDAAEAEKLI DGRLFMGMDVVDTLSSTLDILGVAK

# >DM\_validata53

MATFLGLSSKQEKALVRLDKYLNLGEIAVSLVTDSATSIKVEGRQGYYQVSYKQPHQLYRALALLSAAL RSGQDEVQIEEEAAYEDLAYMADCSRNAVLNLSSAKKMIEVLALMGYSTFELYMEDTYEIENQPYFGY FRGRYTVAELQEIEDYAADFDMSFVPCIQTLAHLSAFVKWGIKEVQELRDVEDILLIGEEKVYDLIEGMF QTMAHLHTRKINIGMDEAHLVGLGRYLIKHGFQNRSLLMCQHLERVLDIADKYGFNCQMWSDMFF KLMSADGQYDRDVEIPEETRVYLDRLKERVTLVYWDYYQDSEEKYNRNFQNHHKISQDIAFAGGAW KWIGFTPHNHFSRLVAIEANKACRKNQVKEVIVTGWGDNGGETSQFSVLPALQIWAELAYRNDLKKV SEHFLVSTGLDFDDFMKIDLANLLPDLPDNLSGINPNRYVLYQDVLCPLLEQHIRPEKDKQHFASSAQ QLGEISKRAGEYAYIFETQAQLNALLALKISITSGIQKAYRNGDKEHLSALAEKDFPQLYQMVEDFSDQ FSRQWQQENKIFGLDTIDIRFGGLLKRIKRAQERLEQFISGQIDCVEELEQEILPFNDFYKDQGLTATTA NQWHLIATASTIYTT

### >DM\_validata54

SELNEKLATAWEGFTKGDWQNEVNVRDFIQKNYTPYEGDESFLAGATEATTTLWDKVMEGVKLENR THAPVDFDTAVASTITSHDAGYINKQLEKIVGLQTEAPLKRALIPFGGIKMIEGSCKAYNRELDPMIKKIF TEYRKTHNQGVFDVYTPDILRCRKSGVLTGLPDAYGRGRIIGDYRRVALYGIDYLMKDKLAQFTSLQA DLENGVNLEQTIRLREEIAEQHRALGQMKEMAAKYGYDISGPATNAQEAIQWTYFGYLAAVKSQNG AAMSFGRTSTFLDVYIERDLKAGKITEQEAQEMVDHLVMKLRMVRFLRTPEYDELFSGDPIWATESIG GMGLDGRTLVTKNSFRFLNTLYTMGPSPEPNMTILWSEKLPLNFKKFAAKVSIDTSSLQYENDDLMRP DFNNDDYAIACCVSPMIVGKQMQFFGARANLAKTMLYAINGGVDEKLKMQVGPKSEPIKGDVLNY DEVMERMDHFMDWLAKQYITALNIIHYMHDKYSYEASLMALHDRDVIRTMACGIAGLSVAADSLSA IKYAKVKPIRDEDGLAIDFEIEGEYPQFGNNDPRVDDLAVDLVERFMKKIQKLHTYRDAIPTQSVLTITS NVVYGKKTGNTPDGRR

# >DM validata55

LEEDKIKGMFNPKIWDKTFQDGLKKEIEDSQPYNWGTIHELVNDDLLRAVRKEIETEIHFTKKETDIYRV NQSGDLANLSGLDWDDLSRLPNLFKLRQILYSKQYRDFFGYVTKAGKLSGSKTDMSINTYTKGCHLLT HDDVIGSRRISFILYLPDPDRKWKSHYGGGLRLFPSILPNVPHSDPSAKLVPQFNQIAFFKVLPGFSFHD VEEVKVDKHRLSIQGWYHIPQVGEEGYIPGEEEAWVRNNTSTLAQIESNVLEDFEFPKDERNILSFHEV KHFEKMLKGDAGAKTDNTPKESMTSVISDSVKLSEAEFTYLSQYISPEHLSSKGIEKLQKQFVENSSLQI ESFLNDDKSELLKKVIKQKELEQECPYHSKDVKAPWKTAIPPHKARYLYIDGKEYRNFQTEADILEALNN NDLPNFQFTKDAIKIISDASGNSRENNFDAELALIDLAVFHKSTIFKKYLALLTSLCPVSEQILIRRFRPGM DFTLATKCRFNELLKSNPDIIDAVLEGTLCLTPSAGWESGELGGYELYMMDDDEDNKQYLKEDVEDAS VYRADDSGDSVLINDPPAWNTFNLVLRDESVLEFVKYVSWSAKSSRWDVKMKWDVKSCDEDGQED

#### >DM validata57

MSSISLKEIIPPOPSTORNFTTHLSYDPTTNAIAYPCGKSAFVRCLDDGDSKVPPVVQFTGHGSSVVTT VKFSPIKGSQYLCSGDESGKVIVWGWTFDKESNSVEVNVKSEFQVLAGPISDISWDFEGRRLCVVGEG RDNFGVFISWDSGNSLGEVSGHSORINACHLKOSRPMRSMTVGDDGSVVFYOGPPFKFSASDRTH HKQGSFVRDVEFSPDSGEFVITVGSDRKISCFDGKSGEFLKYIEDDQEPVQGGIFALSWLDSQKFATVG ADATIRVWDVTTSKCVOKWTLDKOOLGNOOVGVVATGNGRIISLSLDGTLNFYELGHDEVLKTISGH NKGITALTVNPLISGSYDGRIMEWSSSSMHQDHSNLIVSLDNSKAQEYSSISWDDTLKVNGITKHEFG SQPKVASANNDGFTAVLTNDDDLLILQSFTGDIIKSVRLNSPGSAVSLSQNYVAVGLEEGNTIQVFKLS DLEVSFDLKTPLRAKPSYISISPSETYIAAGDVMGKILLYDLQSREVKTSRWAFRTSKINAISWKPAEKGA NEEEIEEDLVATGSLDTNIFIYSVKRPMKIIKALNAHKDGVNNLLWETPSTLVSSGADACIKRWNVVLE 000000000000000

### >DM\_validata59

MASTANMISQLKKLSIAEPAVAKDSHPDVNIVDLMRNYISQELSKISGVDSSLIFPALEWTNTMERGDL LIPIPRLRIKGANPKDLAVQWAEKFPCGDFLEKVEANGPFIQFFFNPQFLAKLVIPDILTRKEDYGSCKLV ENKKVIIEFSSPNIAKPFHAGHLRSTIIGGFLANLYEKLGWEVIRMNYLGDWGKQFGLLAVGFERYGNE EALVKDPIHHLFDVYVRINKDIEEEGDSIPLEQSTNGKAREYFKRMEDGDEEALKIWKRFREFSIEKYIDT YARLNIKYDVYSGESQVSKESMLKAIDLFKEKGLTHEDKGAVLIDLTKFNKKLGKAIVQKSDGTTLYLTR DVGAAMDRYEKYHFDKMIYVIASQQDLHAAQFFEILKQMGFEWAKDLQHVNFGMVQGMSTRKGT VVFLDNILEETKEKMHEVMKKNENKYAQIEHPEEVADLVGISAVMIQDMQGKRINNYEFKWERMLSF EGDTGPYLQYAHSRLRSVERNASGITQEKWINADFSLLKEPAAKLLIRLLGQYPDVLRNAIKTHEPTTVV TYLFKLTHQVSSCYDVLWVAGQTEELATARLALYGAARQVLYNGMRLLGLTPVERM

>DM validata60

KSVAHHEDVYSHNLPPMDEKEMALYKLYRPERVTPKKRSAELLKEPRLNKGMGFSLYEROYLGLHGLL PPAFMTOEOOAYRVITKLREOPNDLARYIOLDGLODRNEKLFYRVVCDHVKELMPIVYTPTVGLACO NFGYIYRKPKGLYITINDNSVSKIYQILSNWHEEDVRAIVVTDGERILGLGDLGAYGIGIPVGKLALYVAL GGVQPKWCLPVLLDVGTNNMDLLNDPFYIGLRHKRVRGKDYDTLLDNFMKACTKKYGQKTLIQFED FANPNAFRLLDKYQDKYTMFNDDIQGTASVIVAGLLTCTRVTKKLVSQEKYLFFGAGAASTGIAEMIV HQMQNEGISKEEACNRIYLMDIDGLVTKNRKEMNPRHVQFAKDMPETTSILEVIRAARPGALIGASTV RGAFNEEVIRAMAEINERPIIFALSNPTSKAECTAEEAYTFTNGAALYASGSPFPNFELNGHTYKPGOG NNAYIFPGVALGTILFQIRHVDNDLFLLAAKKVASCVTEDSLKVGRVYPQLKEIREISIQIAVEMAKYCYK NGTANLYPOPEDLEKYVRAOVYNTEYEELINATYDWPEODMRHGFPVPVVRHDSMDG 11111

### >DM\_validata61

DYVLYKDATKPVEDRVADLLGRMTLAEKIGQMTQIERLVATPDVLRDNFIGSLLSGGGSVPRKGATAK EWQDMVDGFQKACMSTRLGIPMIYGIDAVHGQNNVYGATIFPHNVGLGATRDPYLVKRIGEATALE VRATGIQYAFAPCIAVCRDPRWGRCYESYSEDRRIVQSMTELIPGLQGDVPKDFTSGMPFVAGKNKV AACAKHFVGDGGTVDGINENNTIINREGLMNIHMPAYKNAMDKGVSTVMISYSSWNGVKMHANQ DLVTGYLKDTLKFKGFVISDWEGIDRITTPAGSDYSYSVKASILAGLDMIMVPNKYQQFISILTGHVNG GVIPMSRIDDAVTRILRVKFTMGLFENPYADPAMAEQLGKQEHRDLAREAARKSLVLLKNGKTSTDAP LLPLPKKAPKILVAGSHADNLGYQCGGWTIEWQGDTGRTTVGTTILEAVKAAVDPSTVVVFAENPDA EFVKSGGFSYAIVAVGEHPYTETKGDNLNLTIPEPGLSTVQAVCGGVRCATVLISGRPVVVQPLLAASD ALVAAWLPGSEGQGVTDALFGDFGFTGRLPRTWFKSVDQLPMNVGDAHYDPLFRLGYGLTTNATK KY

# >DM\_validata62

MTIEKEIEGLIHKTNKDLLNENANKDSRVFPTQRDLMAGIVSKHIAKNMVPSFIMKAHESGIIHVHDID YSPALPFTNCCLVDLKGMLENGFKLGNAQIETPKSIGVATAIMAQITAQVASHQYGGTTFANVDKVLS PYVKRTYAKHIEDAEKWQIADALNYAQSKTEKDVYDAFQAYEYEVNTLFSSNGQTPFVTITFGTGTD WTERMIQKAILKNRIKGLGRDGITPIFPKLVMFVEEGVNLYKDDPNYDIKQLALECASKRMYPDIISAKN NKAITGSSVPVSPMGCRSFLSVWKDSTGNEILDGRNNLGVVTLNLPRIALDSYIGTOFNEQKFVELFNE

### >DM\_validata63

DPDQFRAIIESPEGAGHVGYQYRRNTGSTMRMVSDVLDERVSLWDFHCDPSGNVIQPGPNVDSRQ YLQAAIDYVSSNGGGTITIPAGYTWYLGSYGVGGIAGHSGIIQLRSNVNLNIEGRIHLSPFFDLKPFQVF VGFDNGDPASSGNLENCHIYGHGVVDFGGYEFGASSQLRNGVAFGRSYNCSVTGITFQNGDVTWA ITLGWNGYGSNCYVRKCRFINLVNSSVNADHSTVYVNCPYSGVESCYFSMSSSFARNIACSVELHQH DTFYRGSTVNGYCRGAYVVMHAAEAAGAGSYAYNMQVENNIAVIYGQFVILGSDVTATVSGHLND VIVSGNIVSIGERAAFSAPFGAFIDIGPDNSGASNVQDIQRVLVTGNSFYAPANITDSAAITLRANLNG CTFIANNFDCRYMVYNAPGTTSPVVQNLVWDKSNVIGGTHANQRAGQNLFDMQFASVVNSTIEV QLSCEDLSMFSCILFPASCQLSYSKITVDSAWTKSMSNTAVFEGNQQAGANVYVSYPATVNLTSYNT QGAVPFFSTDTNYAWVTSAYSLSINENLDFSPPATYTNKANGQLVGVGYNEIGGVRSVSVRLMLQR OV

>DM\_validata66

MQKRIALSFPEEVLEHVFSFIQLDKDRNSVSLVCKSWYEIERWCRRKVFIGNCYAVSPATVIRRFPKVRS VELKGKPHFADFNLVPDGWGGYVYPWIEAMSSSYTWLEEIRLKRMVVTDDCLELIAKSFKNFKVLVLS SCEGFSTDGLAAIAATCRNLKELDLRESDVDDVSGHWLSHFPDTYTSLVSLNISCLASEVSFSALERLVT RCPNLKSLKLNRAVPLEKLATLLQRAPQLEELGTGGYTAEVRPDVYSGLSVALSGCKELRCLSGFWDA VPAYLPAVYSVCSRLTTLNLSYATVQSYDLVKLLCQCPKLQRLWVLDYIEDAGLEVLASTCKDLRELRV FPSEPFVMEPNVALTEQGLVSVSMGCPKLESVLYFCRQMTNAALITIARNRPNMTRFRLCIIEPKAPDY LTLEPLDIGFGAIVEHCKDLRRLSLSGLLTDKVFEYIGTYAKKMEMLSVAFAGDSDLGMHHVLSGCDSL RKLEIRDCPFGDKALLANASKLETMRSLWMSSCSVSFGACKLLGQKMPKLNVEVIDERGAPDSRPESC PVERVFIYRTVAGPRFDMPGFVWNMDQDSTMRFSRQIITTNGL

>DM validata67

MNMYSMPGYFQNMPTIGKELVNPNPENEQEIKAVESDIHESIKKALDAGITSEEKLNERGQLSAMQRI

NALIDPGTWCPLNSLFNPENNKFGTTNIVNGLGRVDGKWVYIVASDNKKMAGAWVPGQAENLIRC SDAAKMMHLPLIYLLNCSGVEFPNQDKVYPNRRGGGTPFFRNSELNQLGIPVIVGIYGTNPAGGGYH SISPTILIAHQDANMAVGGAGILSGMNPKGYIDDEAAEQIIAAQIENSKLKVPAPGSVPIHYDETGFFRE VYQNDLGVIDGIKKYISYLPAYNLEFFRVDTPKAPQLPAEDLYSIIPMNQKRPYDIYEVIARLFDNSEFSE YKKGYGPEMVTGLAKVNGLLVGVIANVQGLLMNYPEYKQNSVGIGGKLYRQGLIKMNEFVTLCARD RIPLIWLQDTTGIDVGDEAEKAELLGLGQSLIYSIENSKLPSLEITIRKASAAAHYVLGGPQGNNTNVFSI GTGACEYYVMPGETAANAMYSRKLVKAKKAGEDLQPIIGKMNDMIQMYTDKSRPKYCTEKGMVDEI VDMTEVRPYIQAFTEAAYQNPQSICPMHQMLTPRSTREFETFGK

#### >DM validata70

AGFKPAPPAGQLGAVIVDPYGNAPLTALVDLDSHVISDVKVTVHGKGEKGVEISYPVGQESLKTYDGV PIFGLYQKFANKVTVEWKENGKVMKDDYVVHTSAIVNNYMDNRSISDLQQTKVIKVAPGFEDRLYLV NTHTFTAQGSDLHWHGEKDKNAGILDAGPATGALPFDIAPFTFIVDTEGEYRWWLDQDTFYDGRDR DINKRGYLMGIRETPRGTFTAVQGQHWYEFDMMGQVLEDHKLPRGFADATHESIETPNGTVLLRVG KSNYRRDDGVHVTTIRDHILEVDKSGRVVDVWDLTKILDPKRDALLGALDAGAVCVNVDLAHAGQQ AKLEPDTPFGDALGVGPGRNWAHVNSIAYDAKDDSIILSSRHQGVVKIGRDKQVKWILAPSKGWEKP LASKLLKPVDANGKPITCNENGLCENSDFDFTYTQHTAWISSKGTLTIFDNGDGRHLEQPALPTMKYS RFVEYKIDEKKGTVQQVWEYGKERGYDFYSPITSIIEYQADRNTMFGFGGSIHLFDVGQPTVGKLNEID YKTKEVKVEIDVLSDKPNOTHYRALLVRPOOMFK

### >DM\_validata71

MSGCRAQNAPGGIPVTPKSSYSGPIVVDPVTRIEGHLRIEVEVENGKVKNAYSSSTLFRGLEIILKGRDP RDAQHFTQRTCGVCTYTHALASTRCVDNAVGVHIPKNATYIRNLVLGAQYLHDHIVHFYHLHALDF VDVTAALKADPAKAAKVASSISPRKTTAADLKAVQDKLKTFVETGQLGPFTNAYFLGGHPAYYLDPET NLIATAHYLEALRLQVKAARAMAVFGAKNPHTQFTVVGGVTCYDALTPQRIAEFEALWKETKAFVDE VYIPDLLVVAAAYKDWTQYGGTDNFITFGEFPKDEYDLNSRFFKPGVVFKRDFKNIKPFDKMQIEEHVR HSWYEGAEARHPWKGQTQPKYTDLHGDDRYSWMKAPRYMGEPMETGPLAQVLIAYSQGHPKVK AVTDAVLAKLGVGPEALFSTLGRTAARGIETAVIAEYVGVMLQEYKDNIAKGDNVICAPWEMPKQAE GVGFVNAPRGGLSHWIRIEDGKIGNFQLVVPSTWTLGPRCDKNNVSPVEASLIGTPVADAKRPVEILR TVHSFDPCIACGVHVIDGHTNEVHKFRIL

#### >DM validata72

MVRSGNKAAVVLCMDVGFTMSNSIPGIESPFEQAKKVITMFVQRQVFAENKDEIALVLFGTDGTDNP LSGGDQYQNITVHRHLMLPDFDLLEDIESKIQPGSQQADFLDALIVSMDVIQHETIGKKFEKRHIEIFTD LSSRFSKSQLDIIIHSLKKCDISLQFFLPFSLGKEDGSGDRGDGPFRLGGHGPSFPLKGITEQQKEGLEIVK MVMISLEGEDGLDEIYSFSESLRKLCVFKKIERHSIHWPCRLTIGSNLSIRIAAYKSILQERVKKTWTVVDA KTLKKEDIQKETVYCLNDDDETEVLKEDIIQGFRYGSDIVPFSKVDEEQMKYKSEGKCFSVLGFCKSSQV QRRFFMGNQVLKVFAARDDEAAAVALSSLIHALDDLDMVAIVRYAYDKRANPQVGVAFPHIKHNYE CLVYVQLPFMEDLRQYMFSSLKNSKKYAPTEAQLNAVDALIDSMSLAKKDEKTDTLEDLFPTTKIPNPR FQRLFQCLLHRALHPREPLPPIQQHIWNMLNPPAEVTTKSQIPLSKIKTLFPLIEAKKKDQVTAQEIFQD NHEDGPTAK

### >DM validata74

MAVRASEISRVYEAYPEKKATLYFLVLGFLALIVGSLFGPFQALNYGNVDAYPLLKRLLPFVQSYYQGLT LHGVLNAIVFTQLFAQAIMVYLPARELNMRPNMGLMWLSWWMAFIGLVVAALPLLANEATVLYTFY PPLKGHWAFYLGASVFVLSTWVSIYIVLDLWRRWKAANPGKVTPLVTYMAVVFWLMWFLASLGLVL EAVLFLLPWSFGLVEGVDPLVARTLFWWTGHPIVYFWLLPAYAIIYTILPKQAGGKLVSDPMARLAFLLF LLLSTPVGFHHQFADPGIDPTWKMIHSVLTLFVAVPSLMTAFTVAASLEFAGRLRGGRGLFGWIRALP WDNPAFVAPVLGLLGFIPGGAGGIVNASFTLDYVVHNTAWVPGHFHLQVASLVTLTAMGSLYWLLP NLTGKPISDAQRRLGLAVVWLWFLGMMIMAVGLHWAGLLNVPRRAYIAQVPDAYPHAAVPMVFN VLAGIVLLVALLLFIYGLFSVLLSRERKPELAEAPLPFAEVISGPEDRRLVLAMDRIGFWFAVAAILVVLAY GPTLVOLFGHLNPVPGWRLW

#### >DM validata75

MSKTQEFRPLTLPPKLSLSDFNEFIQDIIRIVGSENVEVISSKDQIVDGSYMKPTHTHDPTHVMDQDYFL ASAIVAPRNVADVQSIVGLANKFSFPLWPISIGRNSGYGGAAPRVSGSVVLDMGKNMNRVLEVNVE GAYCVVEPGVTYHDLHNYLEANNLRDKLWLDVPDLGGGSVLGNAVERGVGYTPYGDHWMMHSG MEVVLANGELLRTGMGALPDPKRPETMGLKPEDQPWSKIAHLFPYGFGPYIDGLFSQSNMGIVTKIGI WLMPNPGGYQSYLITLPKDGDLKQAVDIIRPLRLGMALQNVPTIRHILLDAAVLGDKRSYSSRTEPLSD EELDKIAKQLNLGRWNFYGALYGPEPIRRVLWETIKDAFSAIPGVKFYFPEDTPENSVLRVRDKTMQGI PTYDELKWIDWLPNGAHLFFSPIAKVSGEDAMMQYAVTKKRCQEAGLDFIGTFTVGMREMHHIVCIV FNKKDLIQKRKVQWLMRTLIDDCAANGWGEYRTHLAFMDQIMETYNWNNSSFLRFNEVLKNAVDP NGIIAPGKSGVWPSQYSHVTWKL

### >DM\_validata76

MTDNNKYRDVEIRAPRGNKLTAKSWLTEAPLRMLMNNLDPQVAENPKELVVYGGIGRAARNWECY DKIVETLTRLEDDETLLVQSGKPVGVFKTHSNAPRVLIANSNLVPHWANWEHFNELDAKGLAMYGQ MTAGSWIYIGSQGIVQGTYETFVEAGRQHYGGSLKGKWVLTAGLGGMGGAQPLAATLAGACSLNIE SQQSRIDFRLETRYVDEQATDLDDALVRIAKYTAEGKAISIALHGNAAEILPELVKRGVRPDMVTDQTS AHDPLNGYLPAGWTWEQYRDRAQTEPAAVVKAAKQSMAVHVQAMLDFQKQGVPTFDYGNNIR QMAKEEGVADAFDFPGFVPAYIRPLFCRGVGPFRWAALSGEAEDIYKTDAKVKELIPDDAHLHRWLD MARERISFQGLPARICWVGLGLRAKLGLAFNEMVRSGELSAPVVIGRDHLDSGSVSSPNAETEAMRD GSDAVSDWPLLNALLNTAGGATWVSLHHGGGVGMGFSQHSGMVIVCDGTDEAAERIARVLTNDP GTGVMRHADAGYDIAIDCAKEQGLDLPMITG

### >DM validata77

MSEAEARPTNFIRQIIDEDLASGKHTTVHTRFPPEPNGYLHIGHAKSICLNFGIAQDYKGQCNLRFDDT NPVKEDIEYVESIKNDVEWLGFHWSGNVRYSSDYFDQLHAYAIELINKGLAYVDELTPEQIREYRGTLT QPGKNSPYRDRSVEENLALFEKMRAGGFEEGKACLRAKIDMASPFIVMRDPVLYRIKFAEHHQTGNK WCIYPMYDFTHCISDALEGITHSLCTLEFQDNRRLYDWVLDNITIPVHPRQYEFSRLNLEYTVMSKRKL NLLVTDKHVEGWDDPRMPTISGLRRRGYTAASIREFCKRIGVTKQDNTIEMASLESCIREDLNENAPR AMAVIDPVKLVIENYQGEGEMVTMPNHPNKPEMGSRQVPFSGEIWIDRADFREEANKQYKRLVLGK EVRLRNAYVIKAERVEKDAEGNITTIFCTYDADTLSKDPADGRKVKGVIHWVSAAHALPVEIRLYDRLFS

VPNPGAADDFLSVINPESLVIKQGFAEPSLKDAVAGKAFQFEREGYFCLDSRHSTAEKPVFNRTVGLR DTWAKVGE

### >DM validata78

MALRVAAFDLDGVLALPSIAGAFRRSEEALALPRDFLLGAYQTEFPEGPTEQLMKGKITFSQWVPLMD ESYRKSSKACGANLPENFSISQIFSQAMAARSINRPMLQAAIALKKKGFTTCIVTNNWLDDGDKRDSL AQMMCELSQHFDFLIESCQVGMIKPEPQIYNFLLDTLKAKPNEVVFLDDFGSNLKPARDMGMVTILV HNTASALRELEKVTGTQFPEAPLPVPCNPNDVSHGYVTVKPGIRLHFVEMGSGPALCLCHGFPESWF SWRYQIPALAQAGFRVLAIDMKGYGDSSSPPEIEEYAMELLCKEMVTFLDKLGIPQAVFIGHDWAGV MVWNMALFYPERVRAVASLNTPFMPPDPDVSPMKVIRSIPVFNYQLYFQEPGVAEAELEKNMSRTFK SFFRASDETGFIAVHKATEIGGILVNTPEDPNLSKITTEEEIEFYIQQFKKTGFRGPLNWYRNTERNWKW SCKGLGRKILVPALMVTAEKDIVLRPEMSKNMEKWIPFLKRGHIEDCGHWTQIEKPTEVNQILIKWLQT FVONPSVTSKI

#### >DM\_validata79

MSSAEEKLFMKALKEKFEESPEEKYTKFYIFGGWKQSERKKEFKEWADKIVEERGVPHYNPDIGVPLGQ RKLMSYQVSGTDVFVEGDDLTFVNNAAMQQMWDDIRRTVIVGMDTAHRVLERRLGKEVTPETINE YMETLNHALPGGAVVQEHMVEIHPGLTWDCYAKIITGDLELADEIDDKFLIDIEKLFPEEQAEQLIKAIG NRTYQVCRMPTIVGHVCDGATMYRWAAMQIAMSFICAYKIAAGEAAVSDFAFASKHAEVINMGEM LPARRARGENEPGGVPFGVLADCVQTMRKYPDDPAKVALEVIAAGAMLYDQIWLGSYMSGGVGFT QYATAVYPDNILDDYVYYGLEYVEDKYGIAEAEPSMDVVKDVATEVTLYGLEQYERYPAAMETHFGG SQRAAVCAAAAGCSTAFATGHAQAGLNGWYLSQILHKEGQGRLGFYGYALQDQCGAANSLSVRS DEGLPLELRGPNYPNYAMNVGHLGEYAGIVQAAHAARGDAFCVHPVIKVAFADENLVFDFTEPRKEF AKGALREFEPAGERDLIVPAE

### >DM\_validata82

MASWSHPQFEKGASTSLYKKAGLMDSQRSTLVHWFRKGLRLHDNPALSHIFTAANAAPGRYFVRPIF ILDPGILDWMQVGANRWRFLQQTLEDLDNQLRKLNSRLFVVRGKPAEVFPRIFKSWRVEMLTFETDIE PYSVTRDAAVQKLAKAEGVRVETHCSHTIYNPELVIAKNLGKAPITYQKFLGIVEQLKVPKVLGVPEKLK NMPTPPKDEVEQKDSAAYDCPTMKQLVKRPEELGPNKFPGGETEALRRMEESLKDEIWVARFEKPNT APNSLEPSTTVLSPYLKFGCLSARLFNQKLKEIIKRQPKHSQPPVSLIGQLMWREFYYTVAAAEPNFDR MLGNVYCMQIPWQEHPDHLEAWTHGRTGYPFIDAIMRQLRQEGWIHHLARHAVACFLTRGDLWIS WEEGQRVFEQLLLDQDWALNAGNWMWLSASAFFHQYFRVYSPVAFGKKTDPQGHYIRKYVPELSK YPAGCIYEPWKASLVDQRAYGCVLGTDYPHRIVKHEVVHKENIKRMGAAYKVNREVRTGKEEESSFEE KSET

### >DM validata85

MMMASKDATSSVDGASGAGOLVPEVNASDPLAMDPVAGSSTAVATAGOVNPIDPWIINNFVOAP OGEFTISPNNTPGDVLFDLSLGPHLNPFLLHLSOMYNGWVGNMRVRIMLAGNAFTAGKIIVSCIPPG FGSHNLTIAQATLFPHVIADVRTLDPIEVPLEDVRNVLFHNNDRNQQTMRLVCMLYTPLRTGGGTGD SFVVAGRVMTCPSPDFNFLFLVPPTVEQKTRPFTLPNLPLSSLSNSRAPLPISSMGISPDNVQSVQFQN GRCTLDGRLVGTTPVSLSHVAKIRGTSNGTVINLTELDGTPFHPFEGPAPIGFPDLGGCDWHINMTOF GHSSOTOYDVDTTPDTFVPHLGSIQANGIGSGNYVGVLSWISPPSHPSGSOVDLWKIPNYGSSITEAT HLAPSVYPPGFGEVLVFFMSKMPGPGAYNLPCLLPOEYISHLASEOAPTVGEAALLHYVDPDTGRNL GEFKAYPDGFLTCVPNGASSGPQQLPINGVFVFVSWVSRFYQLKPVGTASSARGRLGLRR 11111

### >DM\_validata86

MALSTATKAATDALAANRAPTSVNAQEVHRWLQSFNWDFKNNRTKYATKYKMANETKEQFKLIAK EYARMEAVKDERQFGSLQDALTRLNAGVRVHPKWNETMKVVSNFLEVGEYNAIAATGMLWDSAQ AAEQKNGYLAQVLDEIRHTHQCAYVNYYFAKNGQDPAGHNDARRTRTIGPLWKGMKRVFSDGFIS GDAVECSLNLQLVGEACFTNPLIVAVTEWAAANGDEITPTVFLSIETDELRHMANGYQTVVSIANDPA SAKYLNTDLNNAFWTQQKYFTPVLGMLFEYGSKFKVEPWVKTWDRWVYEDWGGIWIGRLGKYGVE SPRSLKDAKQDAYWAHHDLYLLAYALWPTGFFRLALPDQEEMEWFEANYPGWYDHYGKIYEEWRA

### >DM validata87

INDLDISPIDPQTGGSFDQQGVFVKGYAMLGVTGQKGIDGSPDLDGQDEGESGFYRTTFNCNELPTD ECLWAWQKNQDIPQLTSISWSPSSQRTEWVYVRLGYDITQYNFFLDQTEGMTDAETLRQRAEIRFLR ALHYWYFLDLFGKAPFKEHFSNDLPVEKKGTELYTYIQNELNEIEADMYEPRQAPFGRADKAANWLLR ARLYLNAGVYTGQTDYAKAEEYASKVIGSAYKLCTNYSELFMADNDENENAMQEIILPIRQDGVKTR NYGGSTYLVCGTRVAGMPRMGTTNGWSCIFARAAMVQKFFSNLEDVPMLPADVEIPTKGLDTDEQI DAFDAEHGIRTEDMIKAAGDDRALLYSGVGGGRRKIQTDAISGFTDGLSIVKWQNYRSDGKPVSHAT YPDTDIPLFRLAEAYLTRAEAIFRQGGDATGDINELRKRANCTRKVQTVTEQELIDEWAREFYLEGRRRS DLVRFGMFTTNKYLWDWKGGAMNGTSVASYYNKYPIPVSDINNNRNMSQNEGYK

### >DM validata88

MKARRSNELSKLRMRFFSALNHTSEIDLHTLFDNLKSNLTLGSIEHLQEGSVTYAIIQELLKGADAQKKIE SFLKGAIKNVIHPGVIKGLTPNEINWNVAKAYPEYYEHEKLPDVTFGGFKVRDSNEFKFKTNVQTSIWF SIKPELFMPSKQQEALKRRREQYPGCKIRLIYSSSLLNPEANRQMKAFAKKQNISLIDIDSVKTDSPLYPLI KAELANLGMGGNPAAASDLCRWIPELFNEGFYVDIDLPVDSSKIVEGHQITGGVPIMLNMGSIISEPIA PHHRRQEAVCMATDIIAYANDRETQVMMDTVALHLKNIYDDPYTALKDTPLAQTAFFNRCEEEGKNI FELRKGLQDAFRSDSLLELYVFLGPAKFKEVFKLKETQIKYIDDHISEFNEHDLLLHLISDNPSEINQHTLD FGRAKVMYMDIAKEHYSAFYKPLVEEISGPGAIYNALGGASNFTTTHRRSTGPMLPTTPPRVLQVFCD AHDKGPFVSDNIARWOTNVRELGVLNREGLSWLPSVG

MVHWADYIADKIIRERGEKEKYVVESGITPSGYVHVGNFRELFTAYIVGHALRDKGYEVRHIHMWDDY DRFRKVPRNVPQEWKDYLGMPISEVPDPWGCHESYAEHFMRKFEEEVEKLGIEVDLLYASELYKRGEY SEEIRLAFEKRDKIMEILNKYREIAKQPPLPENWWPAMVYCPEHRREAEIIEWDGGWKVKYKCPEGHE GWVDIRSGNVKLRWRVDWPMRWSHFGVDFEPAGKDHLVAGSSYDTGKEIIKEVYGKEAPLSLMYEF VGIKGQKGKMSGSKGNVILLSDLYEVLEPGLVRFIYARHRPNKEIKIDLGLGILNLYDEFEKVERIYFGVEG GKGDDEELRRTYELSMPKKPERLVAQAPFRFLAVLVQLPHLTEEDIINVLIKQGHIPRDLSKEDVERVKL RINLARNWVKKYAPEDVKFSILEKPPEVEVSEDVREAMNEVAEWLENHEEFSVEEFNNILFEVAKRRGI SSREWFSTLYRLFIGKERGPRLASFLASLDRSFVIKRLRLEG

MASMEEPPLLPGENIKDMAKDVTYICPFTGAVRGTLTVTNYRLYFKSMERDPPFVLDASLGVINRVEKI GGASSRGENSYGLETVCKDIRNLRFAHKPEGRTRRSIFENLMKYAFPVSNNLPLFAFEYKEVFPENGWK LYDPLLEYRRQGIPNESWRITKINERYELCDTYPALLVVPANIPDEELKRVASFRSRGRIPVLSWIHPESQ ATITRCSQPMVGVSGKRSKEDEKYLQAIMDSNAQSHKIFIFDARPSVNAVANKAKGGGYESEDAYQN AELVFLDIHNIHVMRESLRKLKEIVYPNIEETHWLSNLESTHWLEHIKLILAGALRIADKVESGKTSVVVH SSDGWDRTAQLTSLAMLMLDGYYRTIRGFEVLVEKEWLSFGHRFQLRVGHGDKNHADADRSPVFLQ FIDCVWQMTRQFPTAFEFNEYFLITILDHLYSCLFGTFLCNSEQQRGKENLPKRTVSLWSYINSQLEDFT NPLYGSYSNHVLYPVASMRHLELWVGYYIRWNPRAAALE

MNTVSPAKKKVIIIGAGIAGLKAASTLHQNGIQDCLVLEARDRVGGRLQTVTGYQGRKYDIGASWHH DTLTNPLFLEEAQLSLNDGRTRFVFDDDNFIYIDEERGRVDHDKELLLEIVDNEMSKFAELEFHQHLGV SDCSFFQLVMKYLLQRRQFLTNDQIRYLPQLCRYLELWHGLDWKLLSAKDTYFGHQGRNAFALNYD SVVQRIAQSFPQNWLKLSCEVKSITREPSKNVTVNCEDGTVYNADYVIITVPQSVLNLSVQPEKNLRG RIEFQPPLKPVIQDAFDKIHFGALGKVIFEFEECCWSNESSKIVTLANSTNEFVEIVRNAENLDELDSMLE REDSQKHTSVTCWSQPLFFVNLSKSTGVASFMMLMQAPLTNHIESIREDKERLFSFFQPVLNKIMKCL DSEDVIDGMRPIENIANANKPVLRNIIVSNWTRDPYSRGAYSACFPGDDPVDMVVAMSNGQDSRIR FAGEHTIMDGAGCAYGAWESGRREATRISDLLKLEHHHHHH

MGAPVLPAAFGFLASARTGGGRAPGPVFATRGSHTDIDTPQGERSLAATLVHAPSVAPDRAVARSLT GAPTTAVLAGEIYNRDELLSVLPAGPAPEGDAELVLRLLERYDLHAFRLVNGRFATVVRTGDRVLLATD HAGSVPLYTCVAPGEVRASTEAKALAAHRDPKGFPLADARRVAGLTGVYQVPAGAVMDIDLGSGTA VTHRTWTPGLSRRILPEGEAVAAVRAALEKAVAQRVTPGDTPLVVLSGGIDSSGVAACAHRAAGELD TVSMGTDTSNEFREARAVVDHLRTRHREITIPTTELLAQLPYAVWASESVDPDIIEYLLPLTALYRALDG PERRILTGYGADIPLGGMHREDRLPALDTVLAHDMATFDGLNEMSPVLSTLAGHWTTHPYWDREVL DLLVSLEAGLKRRHGRDKWVLRAAMADALPAETVNRPKLGVHEGSGTTSSFSRLLLDHGVAEDRVHE AKRQVVRELFDLTVGGGRHPSEVDTDDVVRSVADRTARGAA

#### >DM\_validata96

MKMLNKLAGYLLPIMVLLNVAPCLGQVVASNETLYQVVKEVKPGGLVQIADGTYKDVQLIVSNSGKS GLPITIKALNPGKVFFTGDAKVELRGEHLILEGIWFKDGNRAIQAWKSHGPGLVAIYGSYNRITACVFD CFDEANSAYITTSLTEDGKVPQHCRIDHCSFTDKITFDQVINLNNTARAIKDGSVGGPGMYHRVDHC FFSNPQKPGNAGGGIRIGYYRNDIGRCLVDSNLFMRQDSEAEIITSKSQENVYYGNTYLNCQGTMNF RHGDHQVAINNFYIGNDQRFGYGGMFVWGSRHVIACNYFELSETIKSRGNAALYLNPGAMASEHAL AFDMLIANNAFINVNGYAIHFNPLDERRKEYCAANRLKFETPHQLMLKGNLFFKDKPYVYPFFKDDYFI AGKNSWTGNVALGVEKGIPVNISANRSAYKPVKIKDIQPIEGIALDLNALISKGITGKPLSWDEVRPYW LKEMPGTYALTARLSADRAAKFKAVIKRNKEH

#### >DM validata97

ADSATPHLDAVEQTLRQVSPGLEGDVWERTSGNKLDGSAADPSDWLLQTPGCWGDDKCADRVGT KRLLAKMTENIGNATRTVDISTLAPFPNGAFQDAIVAGLKESAAKGNKLKVRILVGAAPVYHMNVIPS KYRDELTAKLGKAAENITLNVASMTTSKTAFSWNHSKILVVDGQSALTGGINSWKDDYLDTTHPVSD VDLALTGPAAGSAGRYLDTLWTWTCQNKSNIASVWFAASGNAGCMPTMHKDTNPKASPATGNVP VIAVGGLGVGIKDVDPKSTFRPDLPTASDTKCVVGLHDNTNADRDYDTVNPEESALRALVASAKGHIE ISQQDLNATCPPLPRYDIRLYDALAAKMAAGVKVRIVVSDPANRGAVGSGGYSQIKSLSEISDTLRNRL ANITGGQQAAKTAMCSNLQLATFRSSPNGKWADGHPYAQHHKLVSVDSSTFYIGSKNLYPSWLQD FGYIVESPEAAKQLDAKLLDPQWKYSQETATVDYARGICNA

>DM\_validata98

DNGGYVPAVVIGTGYGAAVSALRLGEAGVQTLMLEMGQLWNQPGPDGNIFCGMLNPDKRSSWFK NRTEAPLGSFLWLDVVNRNIDPYAGVLDRVNYDQMSVYVGRGVGGGSLVNGGMAVEPKRSYFEEIL PRVDSSEMYDRYFPRANSMLRVNHIDTKWFEDTEWYKFARVSREQAGKAGLGTVFVPNVYDFGYM QREAAGEVPKSALATEVIYGNNHGKQSLDKTYLAAALGTGKVTIQTLHQVKTIRQTKDGGYALTVEQ KDTDGKLLATKEISCRYLFLGAGSLGSTELLVRARDTGTLPNLNSEVGAGWGPNGNIMTARANHMW NPTGAHQSSIPALGIDAWDNSDSSVFAEIAPMPAGLETWVSLYLAITKNPQRGTFVYDAATDRAKLN WTRDQNAPAVNAAKALFDRINKANGTIYRYDLFGTQLKAFADDFCYHPLGGCVLGKATDDYGRVA GYKNLYVTDGSLIPGSVGVNPFVTITALAERNVERIIKODVTAS

>DM\_validata99

SDALKVRWPDFNQEAYVGGTMVRSGQDPYARNKFNQVESDKLRMDRAIPDTRHDQCQRKQWRV DLPATSVVITFHNEARSALLRTVVSVLKKSPPHLIKEIILVDDYSNDPEDGALLGKIEKVRVLRNDRREGL MRSRVRGADAAQAKVLTFLDSHCECNEHWLEPLLERVAEDRTRVVSPIIDVINMDNFQYVGASADLK GGFDWNLVFKWDYMTPEQRRSRQGNPVAPIKTPMIAGGLFVMDKFYFEELGKYDMMMDVWGGE NLEISFRVWQCGGSLEIIPCSRVGHVFRKQHPYTFPGGSGTVFARNTRRAAEVWMDEYKNFYYAAVP SARNVPYGNIQSRLELRKKLSCKPFKWYLENVYPELRVPDHQDIAFGALQQGTNCLDTLGHFADGVV GVYECHNAGGNQEWALTKEKSVKHMDLCLTVVDRAPGSLIKLQGCRENDSRQKWEQIEGNSKLRH VGSNLCLDSRTAKSGGLSVEVCGPALSQQWKFTLNLQQ

>DM validata100

MIRFKKTKLIASIAMALCLFSQPVISFSKDITDKNQSIDSGISSLSYNRNEVLASNGDKIESFVPKEGKKAG NKFIVVERQKRSLTTSPVDISIIDSVNDRTYPGALQLADKALVENRPTILMVKRKPININIDLPGLKGENSI KVDDPTYGKVSGAIDELVSKWNEKYSSTHTLPARTQYSESMVYSKSQISSALNVNAKVLENSLGVDFN AVANNEKKVMILAYKQIFYTVSADLPKNPSDLFDDSVTFNDLKQKGVSNEAPPLMVSNVAYGRTIYV

KLETTSSSKDVQAAFKALIKNTDIKNSQQYKDIYENSSFTAVVLGGDAQEHNKVVTKDFDEIRKVIKDN ATFSTKNPAYPISYTSVFLKDNSVAAVHNKTDYIETTSTEYSKGKINLDHSGAYVAQFEVAWDEVSYDK EGNEVLTHKTWDGNYQDKTAHYSTVIPLEANARNIRIKARECTGLAWEWWRDVISEYDVPLTNNINV SIWGTTLYPGSSITYN

#### >DM validata101

MAMHPRKDWYELTRATNWTPSYVTEEQLFPERMSGHMGIPLEKWESYDEPYKTSYPEYVSIQREKDA GAYSVKAALERAKIYENSDPGWISTLKSHYGAIAVGEYAAVTGEGRMARFSKAPGNRNMATFGMMD ELRHGQLQLFFPHEYCKKDRQFDWAWRAYHSNEWAAIAAKHFFDDIITGRDAISVAIMLTFSFETGFA NMQFLGLAADAAEAGDYTFANLISSIQTDESRHAQQGGPALQLLIENGKREEAQKKVDMAIWRAW RLFAVLTGPVMDYYTPLEDRSQSFKEFMYEWIIGQFERSLIDLGLDKPWYWDLFLKDIDELHHSYHMG VWYWRTTAWWNPAAGVTPEERDWLEEKYPGWNKRWGRCWDVITENVLNDRMDLVSPETLPSVC NMSQIPLVGVPGDDWNIEVFSLEHNGRLYHFGSEVDRWVFQQDPVQYQNHMNIVDRFLAGQIQP MTLEGALKYMGFQSIEEMGKDAHDFAWADKCKPAMKKSA

#### >DM validata102

GSEDTMDRINKDHDHTTSVASRFILADVITSTAFSNASGDINTYASSYIEYEVGVDNQLYYAEVRENEP SSSSTFNNSWNGIYSSLKNARIIIDQCGEGGRDHGNDVTRGMAEVMAAYNCALIADFFGDAPCSQA ALVDEKGSPVYMTPKMDTQQEIYTQIISYLDDAIANLQKEDLADVTEQDFLYAGDADKWLKFAYGLK ARYTMRLINRSSNKSADYEKVLDYVSKSFTSADDQAAFDIYDSNNINPFYGFYNSRAGFGASTSLGTKL LAYNDPRANRAFFTPIVDKKRSQVAANDPSLVPAPNGSPDQSTSKYGISAFVYAKTAPTLLMSYHELM FLKAEALCRLNRDAEDALKEAVVAGLLNAENSISIAIKELGSGLNTNSSEVITETSAGKYFDDVVKAKYA ANPLQETMIQKYLAMWGASGEATETYNDFRRMKGLNENFITLTNPNNSSKFPLRYPYGNSDTAANP EVKAAYGNGDYVYSEPVWWAGGSR

>DM validata103

MFESAEVGHSIDKDTYEKAVIELREALLEAQFELKQQARFPVIILINGIEGAGKGETVKLLNEWMDPRLIE VQSFLRPSDEELERPPQWRFWRRLPPKGRTGIFFGNWYSQMLYARVEGHIKEAKLDQAIDAAERFER MLCDEGALLFKFWFHLSKKQLKERLKALEKDPQHSWKLSPLDWKQSEVYDRFVHYGERVLRRTSRDY APWYVVEGADERYRALTVGRILLEGLQAALATKERAKRQPHAAPLVSSLDNRGLLDSLDLGQYLDKD AYKEQLAAEQARLAGLIRDKRFRQHSLVAVFEGNDAAGKGGAIRRVTDALDPRQYHIVPIAAPTEEER AQPYLWRFWRHIPARRQFTIFDRSWYGRVLVERIEGFCAPADWLRAYGEINDFEEQLSEYGIIVVKFWL AIDKQTQMERFKEREKTPYKRYKITEEDWRNRDKWDQYVDAVGDMVDRTSTEIAPWTLVEANDKRF ARVKVLRTINDAIEAAYKKDK

# >DM\_validata104

DISSISEITYSDGTVIASIESDMLRQDFLPSGTVTGISQDYLYFTTLAEAQERMYDYLAQRDNVSAKELK NEATQKFYRDLAAKEIENGGYKITTIDQKIHSAMQSAVADYGYLLDDGTGRVEVGNVLMDNQTGAI LGFVGGRNYQENQNNHAFDTKRSPASTTKPLLAYGIAIDQGLMGSETILSNYPTNFANGNPIMYANS KGTGMMTLGEALNYSWNIPAYWTYRMLRENGVDVKGYMEKMGYEIPEYGIESLPMGGGIEVTVAQ HTNGYQTLANNGVYHQKHVISKIEAADGRVVYEYQDKPVQVYSKATATIMQGLLREVLSSRVTTTFK SNLTSLNPTLANADWIGKTGTTNQDENMWLMLSTPRLTLGGWIGHDDNHSLSQQAGYSNNSNYM AHLVNAIQQASPSIWGNERFALDPSVVKSEVLKSTGQKPGKVSVEGKEVEVTGSTVTSYWANKSGAP ATSYRFAIGGSDADYONAWSSIVGSLP

### >DM\_validata105

MDVNNSKPNDYGTLVKIEQKLFNNANTLKTTTPIKHVVIIFQENNSFDRYFGMYPNAKNPEGEPKFVA KENTPNVNGLTKQLLENNPNTKNPYRLDRNFQPCSQNHEYHQEISSFNGGLMNKFVEHGGHDNDT YKQNCDGQVMGYYDGNTVTALWNYAQNFALNDNTFGTTFGPSTPGALNLVAGANGPAMSPSGN LENIENNYIIDDPNPYYDDCSYGTSKSGDTNTAVAKITDGYNIGHYLTQKGITWGWFQGGFKPTSYSG KTAICDAMSTNKFGVKSRDYIPHHEPFNYWKETSNPHHLAPSDDKYIGSNDQANHQYDISEFWKAL DQNNMPAVSYLKAPGYQDGHGGYSNPLDEQEWLVNTINRIQQSKDWDSTAIIIIYDDSDGDYDHV YSPKSQFSDIKGRQGYGPRLPMLVISPYAKANYVDHSLLNQASVLKFIEYNWGIGSVSKYSNDKYSNN ILNMFDFNKEOKTLKLILDPKTGLVMDKLN

### >DM\_validata106

LMVGGLLLAAASNNVQAEALQPDPAWQQGKLDNGFSWQLLATPQRPSDRIELRLIVNTGSLSENT QEVGFAHLLPRLALMSSASFTPAQLQSLWQQGIDNERPLPPAITSYDFTLYSLSLPNNRPDLLKDALA WLSDTAGNLAVSEQTVNAALNTATDPIATFPQNIQEPWWRYRLKGSSLIGHDPGQPVTQPVDVEKL KQFYQQWYTPDAMTLYVVGNVDSRSIAAQISKAFSELKGKRTAPAAVATLAPLPPEPVSLMNEQAA QDTLSLMWDTPWHPIQDSMALSRYWRSDLAREALFWHIKQVLEKNNQKNLKLGFDCRVQYQRAQ CAIHLNTPVENLTANMTFVARELAALRANGLSQAEFDALMTQKNDQLSKLFATYARTDTDILMSQRL RSQQSGVVDIAPEQYQKLRQAFLSGLTLAELNRELKQQLSQDTTLVLMQPKGEPEVNVKALQEIYNGI MAPOTVAEEEVAPAEAVETAPVMPTTAO

### >DM\_validata107

MAHYPPSKDQLNELIQEVNQWAITNGLSMYPPKFEENPSNASVSPVTIYPTPIPRKCFDEAVQIQPVF NELYARITQDMAQPDSYLHKTTEALALSDSEFTGKLWSLYLATLKSAQYKKQNFRLGIFRSDYLIDKKK GTEQIKQVEFNTVSVSFAGLSEKVDRLHSYLNRANKYDPKGPIYNDQNMVISDSGYLLSKALAKAVES YKSQQSSSTTSDPIVAFIVQRNERNVFDQKVLELNLLEKFGTKSVRLTFDDVNDKLFIDDKTGKLFIRDT EQEIAVVYYRTGYTTTDYTSEKDWEARLFLEKSFAIKAPDLLTQLSGSKKIQQLLTDEGVLGKYISDAEKK SSLLKTFVKIYPLDDTKLGREGKRLALSEPSKYVLKPQREGGGNNVYKENIPNFLKGIEERHWDAYILME LIEPELNENNIILRDNKSYNEPIISELGIYGCVLFNDEQVLSNEFSGSLLRSKFNTSNEGGVAAGFGCLDSI II Y

#### >DM\_validata109

MTFRNCVAVDLGASSGRVMLARYERECRSLTLREIHRFNNGLHSQNGYVTWDVDSLESAIRLGLNKV CAAGIAIDSIGIDTWGVDFVLLDQQGQRVGLPVAYRDSRTNGLMAQAQQQLGKRDIYQRSGIQFLP FNTLYQLRALTEQQPELIPHIAHALLMPDYFSYRLTGKMNWEYTNATTTQLVNINSDDWDESLLAWS GANKAWFGRPTHPGNVIGHWICPQGNEIPVVAVASHDTASAVIASPLNGSRAAYLSSGTWSLMGFE SQTPFTNDTALAANITNEGGAEGRYRVLKNIMGLWLLQRVLQERQINDLPALIAATQALPACRFIINP NDDRFINPDEMCSEIQAACREMAQPIPESDAELARCIFDSLALLYADVLHELAQLRGEDFSQLHIVGG GCQNTLLNQLCADACGIRVIAGPVEASTLGNIGIQLMTLDELNNVDDFRQVVSTTANLTTFTPNPDS EIAHYVALIHSTRQTKELCA

#### >DM\_validata110

MEATPTPADLFSEDYLVDTLDGLTVDDQQAVLASLSFSKFLKHAKVRDWCAQAKIQPSMPALRMAY NYFLFSKVGEFIGSEDVCNFFVDRVFGGVRLLDVASVYAACSQMNAHQRHHICCLVERATSSQSLNP VWDALRDGIISSSKFHWAVKQQNTSKKIFSPWPITNNHFVAGPLAFGLRCEEVVKTLLATLLHPDETN CLDYGFMQSPQNGIFGVSLDFAANVKTDTEGRLQFDPNCKVYEIKCRFKYTFAKMECDPIYAAYQRL YEAPGKLALKDFFYSISKPAVEYVGLGKLPSESDYLVAYDQEWEACPRKKRKLTPLHNLIRECILHNSTTE SDVYVLTDPQDTRGQISIKARFKANLFVNVRHSYFYQVLLQSSIVEEYIGLDSGIPRLGSPKYYIATGFFR KRGYQDPVNCTIGGDALDPHVEIPTLLIVTPVYFPRGAKHRLLHQAANFWSRSAKDTFPYIKWDFSYL SANVPHSP

### >DM\_validata111

# >DM\_validata112

MNPAAEAEFNILLATDSYKVTHYKQYPPNTSKVYSYFECREKKTENSKLRKVKYEETVFYGLQYILNKYL KGKVVTKEKIQEAKDVYKEHFQDDVFNEKGWNYILEKYDGHLPIEIKAVPEGFVIPRGNVLFTVENTDP ECYWLTNWIETILVQSWYPITVATNSREQKKILAKYLLETSGNLDGLEYKLHDFGYRGVSSQETAGIGA SAHLVNFKGTDTVAGLALIKKYYGTKDPVPGYSVPAAEHSTITAWGKDHEKDAFEHIVTQFSSVPVSV VSDSYDIYNACEKIWGEDLRHLIVSRSTQAPLIIRPDSGNPLDTVLKVLEILGKKFPVTENSKGYKLLPPYL

#### >DM\_validata113

LNPPSAFSGAALACLEKMQASGVEEKCIHIFLIQHALVRKGETGYIPEKSISPVESLPFLQGIETKGENTAL LRQAVVLKLNGGLGTGMGLNGPKSLLQVKNGQTFLDFTALQLEHFRQVRNCNVPFMLMNSFSTSG ETKNFLRKYPTLYEVFDSDIELMQNRVPKIRQDNFFPVTYEADPTCEWVPPGHGDVYTVLYSSGKLDY LLGKGYRYMFISNGDNLGATLDVRLLDYMHEKQLGFLMEVCRRTESDKKGGHLAYKDVIDETTGQTR RRFVLRESAQCPKEDEDSFQNIAKHCFFNTNNIWINLMELKKMMDEQLGVLRLPVMRNPKTVNPQD SQSTKVYQLEVAMGAAISLFDRSEAVVVPRERFAPVKTCSDLLALRSDAYQVTEDQRLVLCEERNGKP PAIDLDGEHYKMIDGFEKLVKGGVPSLRQCTSLTVRGLVEFGADVSVRGNVVIKNLKEEPLIIGSGRVLD NEVVVVE

# >DM validata114

SIDETRAHLLIKEKMMRLGGRLVLNTKEELANERLMTLKIAEMKEAMRTLIFPPSMHFFQAKHLIERSQ VFNILRMMPKGAALHLHDIGIVTMDWLVRNVTYRPHCHICFTPRGIMQFRFAHPTPRPSEKCSKWILL EDYRKRVQNVTEFDDSLLRNFTLVTQHPEVIYTNQNVVWSKFETIFFTISGLIHYAPVFRDYVFRSMQE FYEDNVLYMEIRARLLPVYELSGEHHDEEWSVKTYQEVAQKFVETHPEFIGIKIIYSDHRSKDVAVIAESI RMAMGLRIKFPTVVAGFDLVGHEDTGHSLHDYKEALMIPAKDGVKLPYFFHAGETDWQGTSIDRNIL DALMLNTTRIGHGFALSKHPAVRTYSWKKDIPIEVCPISNQVLKLVSDLRNHPVATLMATGHPMVISS DDPAMFGAKGLSYDFYEVFMGIGGMKADLRTLKQLAMNSIKYSTLLESEKNTFMEIWKKRWDKFIAD VATK

# >DM validata115

QMRLPSADVYRFAEPDSEENIIFEENMQPKAGIPIIKAGTVIKLIERLTYHMYADPNFVRTFLTTYRSFCK PQELLSLIIERFEIPEPEPTEADRIAIENGDQPLSAELKRFRKEYIQPVQLRVLNVCRHWVEHHFYDFERD

AYLLQRMEEFIGTVRGKAMKKWVESITKIIQRKKIARDNGPGHNITFQSSPPTVEWHISRPGHIETFDLL TLHPIEIARQLTLLESDLYRAVQPSELVGSVWTKEDKEINSPNLLKMIRHTTNLTLWFEKCIVETENLEER VAVVSRIIEILQVFQELNNFNGVLEVVSAMNSSPVYRLDHTFEQIPSRQKKILEEAHELSEDHYKKYLAK LRSINPPCVPFFGIYLTNILKTEEGNPEVLKRHGKELINFSKRRKVAEITGEIQQYQNQPYCLRVESDIKRF FENLNPMGNSMEKEFTDYLFNKSLEIEPRNPKPLPRFPKKYSYPLKSPGVRPSNPR

#### >DM\_validata116

MGKNLSLRQDDAQHALSANTSSAYNSVYDFLRYHDRGDGLTVNGKTSYSIDQAAAQITRENVSWN GTNVFGKSANLTFKFLQSVSSIPSGDTGFVKFNAEQIEQAKLSLQSWSDVANLTFTEVTGNKSANITFG NYTRDASGNLDYGTQAYAYYPGNYQGAGSSWYNYNQSNIRNPGSEEYGRQTFTHEIGHALGLAHP GEYNAGEGDPSYNDAVYAEDSYQFSIMSYWGENETGADYNGHYGGAPMIDDIAAIQRLYGANMTT RTGDSVYGFNSNTDRDFYTATDSSKALIFSVWDAGGTDTFDFSGYSNNQRINLNEGSFSDVGGLKG NVSIAHGVTIENAIGGSGNDILVGNSADNILQGGAGNDVLYGGAGADTLYGGAGRDTFVYGSGQDS TVAAYDWIADFQKGIDKIDLSAFRNEGQLSFVQDQFTGKGQEVMLQWDAANSITNLWLHEAGHSS VDFLVRIVGOAAQSDIIV

#### >DM\_validata117

MVLDIQLFRDETGANIIRESQRRRFADPDIVDAIIEADKKWRRTQFLTEASKKLINICSKAVGAKKKAKE ADGDTSEIPPQVKEAYENGTLKGEQVEQLCVLQLKQLSKDLSDQVAGLAKEAQQLEEERDKLMLNV GNILHESVPIAQDEETGNTVVRTFGNTTKRAKLNHVSIMERLGMMDTSKAVTSMAGGRSYVLKGGLV QLQVALVSYSLDFLVKRGYTPFYPPFFLNRDVMGEVAQLSQFDEELYQVSGDGDKKYLIATSEMPIAA YHRGRWFTELKEPLKYAGMSTCFRKEAGAHGRDTLGIFRVHQFDKIEQFVVCSPRQEESWRHLEDMI TTSEEFNKSLGLPYRVVNICSGALNNAAAKKYDLEAWFPASGAFRELVSCSNCTDYQSQSVNCRYGP NLRGTAAQNVKEYCHMLNGTLCAITRTMCCICENYQTEEGVVIPDVLRPYMMGIEMIRFENNAQAE GTTPDKGE

### >DM\_validata118

VVRDVNWGALRIAVSTEDLTDPAYHCARVGQHVKDHAGAIVTCTAEDILTNEKRDILVKHLIPQAVQ LHTERLKVQVQGKWKVTDMVGDICGDFKVPQAHITEGFSNTDFVMYVASVPSEEGVLAWATTCQ TFSDGHPAVGVINIPAANIASRYDQLVTRVVTHEMAHALGFSGPFFEDARIVANVPNVRGKNFDVPVI NSSTAVAKAREQYGCDTLEYLEVEDQGGAGSAGSHIKMRNAQDELMAPAAAAGYYTALTMAIFQD LGFYQADFSKAEVMPWGQNAGCAFLTNKCMEQSVTQWPAMFCNESEDAIRCPTSRLSLGACGVTR HPGLPPYWQYFTDPSLAGVSAFMDYCPVVVPYSDGSCTQRASEAHASLLPFNVFSDAARCIDGAFRP KATDGIVKSYAGLCANVQCDTATRTYSVQVHGSNDYTNCTPGLRVELSTVSNAFEGGGYITCPPYVE VCOGNVOAAKDGGN

#### >DM validata119

GMIDLDFRKLTIEECLKLSEEEREKLPQLSLETIKRLDPHVKAFISVRENVSVEKKGKFWGIPVAIKDNILTL GMRTTCASRILENYESVFDATVVKKMKEAGFVVVGKANLDEFAMGSSTERSAFFPTRNPWDLERVPG GSSGGSAAAVSAGMVVAALGSDTGGSVRQPASLCGVVGYKPTYGLVSRYGLVAFASSLDQIGPITKT VRDAAILMEIISGRDENDATTVNRKVDFLSEIEEGVSGMKFAVPEEIYEHDIEEGVSERFEEALKLLERLG AKVERVKIPHIKYSVATYYVIAPAEASSNLARFDGVKYGLRIKEKGLREMYMKTRNVGFGEEVRRRIMIG TFTLSAAYYEAYFNKAMKVRRKISDELNEVLSQYDAILTPTSPVTAFKIGEIKDPLTYYLMDIFTIPANLAG LPAISVPFGFSNNLPVGVQVIGRRFADGKVFRIARAIEKNSPYNENGMFPLPEVKA

#### >DM validata120

MGSSSSGLVPRGSHMSGSGSGSGTALTPSYLKDDDGRSLILRGFNTASSAKSAPDGMPQFTEADLAR EYADMGTNFVRFLISWRSVEPAPGVYDQQYLDRVEDRVGWYAERGYKVMLDMHQDVYSGAITPEG NSGNGAGAIGNGAPAWATYMDGLPVEPQPRWELYYIQPGVMRAFDNFWNTTGKHPELVEHYAKA WRAVADRFADNDAVVAYDLMNEPFGGSLQGPAFEAGPLAAMYQRTTDAIRQVDQDTWVCVAPQ AIGVNQGLPSGLTKIDDPRAGQQRIAYCPHLYPLPLDIGDGHEGLARTLTDVTIDAWRANTAHTARVL GDVPIILGSFGLDTTLPGARDYIERVYGTAREMGAGVSYWSSDPGPWGPYLPDGTQTLLVDTLNKPYP RAVAGTPTEWSSTSDRLQLTIEPDAAITAPTEIYLPEAGFPGDVHVEGADVVGWDRQSRLLTVRTPAD SGNVTVTVTPAA

>DM\_validata121

>DM\_validata122

GASAKEKFTSLSPAEFFKRNPELAGFPNPARALYQTVRELIENSLDATDVHGILPNIKITIDLIDDARQIYK VNVVDNGIGIPPQEVPNAFGRVLYSSKYVNRQTRGMYGLGVKAAVLYSQMHQDKPIEIETSPVNSKR IYTFKLKIDINKNEPIIVERGSVENTRGFHGTSVAISIPGDWPKAKSRIYEYIKRTYIITPYAEFIFKDPEGNVT YYPRLTNKIPKPPQEVKPHPYGVDREEIKILINNLKRDYTIKEFLVNEFQSIGDTTADKILELAGLKPNKKV KNLTEEEITRLVETFKKYEDFRSPSADSLSVIGEDLIELGLKKIFNPDFAASITRKPKAYQGHPFIVEAGVAF GGSIPVGEEPIVLRYANKIPLIYDEKSDVIWKVVEELDWKRYGIESDQYQMVVMVHLCSTKIPYKSAGK ESIAEVEDIEKEIKNALMEVARKLKQYLSEKRKEQEAKKKLLA

>DM\_validata123

#### >DM validata124

AEPVYPDQLRLFSLGQGVCGDKYRPVNREEAQSVKSNIVGMMGQWQISGLANGWVIMGPGYNGEI KPGTASNTWCYPTNPVTGEIPTLSALDIPDGDEVDVQWRLVHDSANFIKPTSYLAHYLGYAWVGGN HSQYVGEDMDVTRDGDGWVIRGNNDGGCDGYRCGDKTAIKVSNFAYNLDPDSFKHGDVTQSDR QLVKTVVGWAVNDSDTPQSGYDVTLRYDTATNWSKTNTYGLSEKVTTKNKFKWPLVGETELSIEIAA NQSWASQNGGSTTTSLSQSVRPTVPARSKIPVKIELYKADISYPYEFKADVSYDLTLSGFLRWGGNAW YTHPDNRPNWNHTFVIGPYKDKASSIRYQWDKRYIPGEVKWWDWNWTIQQNGLSTMQNNLARV LRPVRAGITGDFSAESQFAGNIEIGAPVPLAADSKVRRARSVDGAGQGLRLEIPLDAQELSGLGFNNV SLSVTPAANO

### >DM validata126

SPLSLPSTKLNPSPDHYAVWGKAIMAENNRRVGPEHMFRTAIRAQQQLQGLADKWTPDAKVYCCG SMVTYGQMERGSDLDLACMFDDPYPSHEVQAKRTDKLRTVIKRYVPHYLRNNLLGLTEARTPVVKLR FANDEKVARARYTPLSEEEDRKARTALLDVRNQCVGDNDVEYIAEKMGRDNVEGIRVDRTTYGCRIAI QCTSKEQMIEAIGFFPDGKIMTRGMREDYTRDVLDVRFVPEMFMYRWDISFVGYGVKNSYLIRHYLH NGPVAARHTAMAVKAWGKATNVGAGSGAMLTSYAVTVMFIYYLLVTRQVLWVDPWSLPHPAHLP RYPDFSPLYDCDPTELGRLLHGFFIFYAHHFDYEREVVSLNRNRRSYRSDIGWNFPQNKKGTFSYNFCI EDPYEDVGTGGLNLVRHLHPAKFQLVKQEFLRAAQCMERFLPTNAPEKSILGVKRADLRHFERDRDR F

# >DM validata127

MDKKQVTDLRSELLDSRFGAKSISTIAESKRFPLHEMRDDVAFQIINDELYLDGNARQNLATFCQTWD DENVHKLMDLSINKNWIDKEEYPQSAAIDLRCVNMVADLWHAPAPKNGQAVGTNTIGSSEACMLG GMAMKWRWRKRMEAAGKPTDKPNLVCGPVQICWHKFARYWDVELREIPMRPGQLFMDPKRMIE ACDENTIGVVPTFGVTYTGNYEFPQPLHDALDKFQADTGIDIDMHIDAASGGFLAPFVAPDIVWDFR LPRVKSISASGHKFGLAPLGCGWVIWRDEEALPQELVFNVDYLGGQIGTFAINFSRPAGQVIAQYYEFL RLGREGYTKVQNASYQVAAYLADEIAKLGPYEFICTGRPDEGIPAVCFKLKDGEDPGYTLYDLSERLRLR GWQVPAFTLGGEATDIVVMRIMCRRGFEMDFAELLLEDYKASLKYLSDHPKLQGIAQQNSFKHT

>DM\_validata128

MEPSSLELPADTVQRIAAELKCHPTDERVALHLDEEDKLRHFRECFYIPKIQDLPPVDLSLVNKDENAIY FLGNSLGLQPKMVKTYLEEELDKWAKIAAYGHEVGKRPWITGDESIVGLMKDIVGANEKEIALMNALT VNLHLLMLSFFKPTPKRYKILLEAKAFPSDHYAIESQLQLHGLNIEESMRMIKPREGEETLRIEDILEVIEKE GDSIAVILFSGVHFYTGQHFNIPAITKAGQAKGCYVGFDLAHAVGNVELYLHDWGVDFACWCSYKYL NAGAGGIAGAFIHEKHAHTIKPALVGWFGHELSTRFKMDNKLQLIPGVCGFRISNPPILLVCSLHASLEI FKQATMKALRKKSVLLTGYLEYLIKHNYGKDKAATKKPVVNIITPSHVEERGCQLTITFSVPNKDVFQEL EKRGVVCDKRNPNGIRVAPVPLYNSFHDVYKFTNLLTSILDSAETKN

>DM validata132

STQEQTPQICVVGSGPAGFYTAQHLLKHHSRAHVDIYEKQLVPFGLVRFGVAPDHPEVKNVINTFTQ TARSDRCAFYGNVEVGRDVTVQELQDAYHAVVLSYGAEDHQALDIPGEELPGVFSARAFVGWYNGL PENRELAPDLSCDTAVILGQGNVALDVARILLTPPDHLEKTDITEAALGALRQSRVKTVWIVGRRGPLQ VAFTIKELREMIQLPGTRPMLDPADFLGLQDRIKEAARPRKRLMELLLRTATEKPGVEEAARRASASRA WGLRFFRSPQQVLPSPDGRRAAGIRLAVTRLEGIGEATRAVPTGDVEDLPCGLVLSSIGYKSRPIDPSVP FDPKLGVVPNMEGRVVDVPGLYCSGWVKRGPTGVITTTMTDSFLTGQILLQDLKAGHLPSGPRPGSA FIKALLDSRGVWPVSFSDWEKLDAEEVSRGQASGKPREKLLDPQEMLRLLGH

>DM\_validata133

MGSSSSGLVPRGSHMFTTKLAEKVVSAWKAKISQPALKAAQDGVIDTVAAALGGVTEHSVQVALKY VAATGGSGDSKLWGVNQRSNMFDAAFVNGMAAHAIDFDDSFPVMRGHPSSSLVPAIFAVGEHVG ANGHNCLKSYVLGIEVVATLGRAVGKGHYLAGWHPTSTLGVFGATTAAALLLGADEEQLRNAWGIA ASNSCGIIKNFGTMTKPMHTGSAARNGVLSAWLSMQSFTGCQTVFDDAEGILAMYGAQPGPELFN AMQKFGTPWAIIAPGLYKKSWPSCYANHKPLAGLFAIMKEHGLTGQDISHVDVGFLPGVEKPLLYMD PRTTEEAKFSIEANIGAALLDGEVSLASFEIEHLDRPAMRAAMKKVTRFDMPSETTFSGTTGYTDIVVHT

#### >DM validata134

MAATSSTSSQSFDIELDIIGQQPPLLSIYTQISLVYPVSDPSQYPTIVSTLEEGLKRLSQTFPWVAGQVKT EGISEGNTGTSKIIPYEETPRLVVKDLRDDSSAPTIEGLRKAGFPLEMFDENVVAPRKTLAIGPGNGPND PKPVLLLQLNFIKGGLILTVNGQHGAMDMTGQDAIIRLLSKACRNESFTEEEISAMNLDRKTVVPLLEN YKVGPELDHQIAKPAPAGDAPPAPAKATWAFFSFTPKALSELKDAATKTLDASSKFVSTDDALSAFIW QSTSRVRLARLDASTPTEFCRAVDMRGPMGVSSTYPGLLQNMTYHDSTVAEIANEPLGATASRLRSE LNSDRLRRRTQALATYMHGLPDKSSVSLTADANPSSSIMLSSWAKVGCWEYDFGFGLGKPESVRRPR FEPFESLMYFMPKKPDGEFTASISLRDEDMERLKADEEWTKYAKYIG

### >DM\_validata135

### >DM\_validata136

MITMTNWESLYEKALDKVEASIRKVRGVLLAYNTNIDAIKYLKREDLEKRIEKVGKEEVLRYSEELPKEIETI PQLLGSILWSIKRGKAAELLVVSREVREYMRKWGWDELRMGGQVGIMANLLGGVYGIPVIAHVPQLS ELQASLFLDGPIYVPTFERGELRLIHPREFRKGEEDCIHYIYEFPRNFKVLDFEAPRENRFIGAADDYNPIL YVREEWIERFEEIAKRSELAIISGLHPLTQENHGKPIKLVREHLKILNDLGIRAHLEFAFTPDEVVRLEIVKLL KHFYSVGLNEVELASVVSVMGEKELAERIISKDPADPIAVIEGLLKLIKETGVKRIHFHTYGYYLALTREKG

EHVRDALLFSALAAATKAMKGNIEKLSDIREGLAVPIGEQGLEVEKILEKEFSLRDGIGSIEDYQLTFIPTK VVKKPKSTVGIGDTISSSAFVSEFSLH

### >DM\_validata137

GSIFKPAPHKARLPAAEIDPTYRRLRWQIFLGIFFGYAAYYLVRKNFALAMPYLVEQGFSRGDLGFALSG ISIAYGFSKFIMGSVSDRSNPRVFLPAGLILAAAVMLFMGFVPWATSSIAVMFVLLFLCGWFQGMGW PPCGRTMVHWWSQKERGGIVSVWNCAHNVGGGIPPLLFLLGMAWFNDWHAALYMPAFCAILVAL FAFAMMRDTPQSCGLPPIEEYKNDYPDDYNEKAEQELTAKQIFMQYVLPNKLLWYIAIANVFVYLLRY GILDWSPTYLKEVKHFALDKSSWAYFLYEYAGIPGTLLCGWMSDKVFRGNRGATGVFFMTLVTIATIVY WMNPAGNPTVDMICMIVIGFLIYGPVMLIGLHALELAPKKAAGTAAGFTGLFGYLGGSVAASAIVGYT VDFFGWDGGFMVMIGGSILAVILLIVVMIGEKRRHEQLLQELVPR

### >DM\_validata138

RSPVFTDNSSPPAVPQSFQVAHLHAPTGSGKSTKVPAAYAAQGYKVLVLNPSVAATLGFGAYMSKA HGVDPNIRTGVRTITTGSPITYSTYGKFLADGGCSGGAYDIIICDECHSTDATSILGIGTVLDQAETAGA RLVVLATATPPGSVTVSHPNIEEVALSTTGEIPFYGKAIPLEVIKGGRHLIFCHSKKKCDELAAKLVALGIN AVAYYRGLDVSVIPTNGDVVVVSTDALMTGFTGDFDSVIDCNTCVTQTVDFSLDPTFTIETTTLPQDA VSRTQRRGRTGRGKPGIYRFVAPGERPSGMFDSSVLCECYDAGCAWYELMPAETTVRLRAYMNTPG LPVCQDHLEFWEGVFTGLTHIDAHFLSQTKQSGENFPYLVAYQATVCARAQAPPPSWDQMWKCLI RLKPTLHGPTPLLYRLGAVQNEVTLTHPITKYIMTCMSADLEVV

# >DM\_validata140

EIPLKYGATNEGKRQDPAMQKFRDNRLGAFIHWGLYAIPGGEWNGKVYGGAAEWLKSWAKVPADE WLKLMDQWNPTKFDAKKWAKMAKEMGTKYVKITTKHHEGFCLWPSKYTKYTVANTPYKRDILGELV KAYNDEGIDVHFYFSVMDWSNPDYRYDIKSKEDSIAFSRFLEFTDNQLKELATRYPTVKDFWFDGTW DASVKKNGWWTAHAEQMLKELVPGVAINSRLRADDKGKRHFDSNGRLMGDYESGYERRLPDPVKD

LKVTQWDWEACMTIPENQWGYHKDWSLSYVKTPIEVIDRIVHAVSMGGNMVVNFGPQADGDFRP EEKAMATAIGKWMNRYGKAVYACDYAGFEKQDWGYYTRGKNDEVYMVVFNQPYSERLIVKTPKGIT VEKATLLTTGEDITVVETTRNEYNVSVPKKNPGEPYVIQLKVRAAKGTKSIYRDALT

KMTWTMKAAEEAEAVANINCSEHGRAFLDGIISEGSPKCECNTCYTGPDCSEKIQGCSADVASGDGL FLEEYWKQHKEASAVLVSPWHRMSYFFNPVSNFISFELEKTIKELHEVVGNAAAKDRYIVFGVGVTQLI HGLVISLSPNMTATPDAPESKVVAHAPFYPVFREQTKYFDKKGYVWAGNAANYVNVSNPEQYIEMV TSPNNPEGLLRHAVIKGCKSIYDMVYYWPHYTPIKYKADEDILLFTMSKFTGHSGSRFGWALIKDESVY NNLLNYMTKNTEGTPRETQLRSLKVLKEVVAMVKTQKGTMRDLNTFGFKKLRERWVNITALLDQSD RFSYQELPQSEYCNYFRRMRPPSPSYAWVKCEWEEDKDCYQTFQNGRINTQNGVGFEASSRYVRLS LIKTQDDFDQLMYYLKDMVKAKRKTPLIKQLFIDQTETASRRPFI

MTEPSLSPAVQTFWKWLQEEGVITAKTPVKASVVTEGLGLVALKDISRNDVILQVPKRLWINPDAVAA SEIGRVCSELKPWLSVILFLIRERSREDSVWKHYFGILPQETDSTIYWSEEELQELQGSQLLKTTVSVKEYV KNECLKLEQEIILPNKRLFPDPVTLDDFFWAFGILRSRAFSRLRNENLVVVPMADLINHSAGVTTEDHA YEVKGAAGLFSWDYLFSLKSPLSVKAGEQVYIQYDLNKSNAELALDYGFIEPNENRHAYTLTLEISESDP FFDDKLDVAESNGFAQTAYFDIFYNRTLPPGLLPYLRLVALGGTDAFLLESLFRDTIWGHLELSVSRDNE ELLCKAVREACKSALAGYHTTIEQDRELKEGNLDSRLAIAVGIREGEKMVLQQIDGIFEQKELELDQLEY YOERRLKDLGLCGENGDILENLYFO

MMNWEHLLSLKRQGDTAKRLRIEQDDTRLGFEVDYDRIIFSAPFRSLQDKTQVIPLSKTDFVHTRLTHS LEVSVVGRSLGRMVGKKLLEKYPHLEQVYGYKFNDFGAIVAAAALAHDIGNPPFGHSGEKAIGEFFKN GYGKRYKDSLTAKEYQDLIKFEGNANGFKVLSQSKPGAQGGLRLSYATLGAFMKYPKESLPHKPSDHI ADKKYGFFQSERALFEDVAQELGLLKRSTTDDVSWSRHPLAYLVEAADDICYTIIDFEDGINLGLIPEEY ALEYMVKLVGQTIDRNKYNALQETSDRVSYLRALAIGTLINESVDTFMKYEEEILAGTFDQSLIDKSNYQ AQITDIINLSIERIYNSREVIEKEIAGYEILSTLLEARCRALDNNDTHYNQLIQQLLAPNDHSEKSLYENLIQ

#### **ICAEVSTMTDGKALRNYKKIKGLDVK**

MAREAKDTVDLYDDRGNCVAEEVPIEVLSPMRNEAIQSIVNDIKRTVAVDLEGIENALQNATVGGKG MKIPGREMDVDIVDNAEAIADEIEKMIRVYQDDDTNVEPMYDGKRLLVQLPSERVKVMADPYSGTL QAGMAVVHAIIDVCEVDMWDANMVKAAVFGRYPQTIDYFGGNVASMLDVPMKQEGVGYALRNI MVNHIVAATRKNTMQAVCLAATLQQTAMFEMGDALGPFERLHLLGYAYQGLNADNMVYDIVKKH GKEGTVGTVVREVVERALEDGVIEVKEELPSFKVYKANDMDLWNAYAAAGLVAAVMVNQGAARAA QGVSATILYYNDLLEYETGLPGVDFGRAEGTAVGFSFFSHSIYGGGGPGIFHGNHIVTRHSKGFAIPPV AAAMALDAGTQMFSPEVTSKLIGDVFGEIDEFREPMKYITEAAAEEAKR

MGSDKIHHHHHHMSEPVIKSLLDTDMYKITMHAAVFTNFPDVTVTYKYTNRSSQLTFNKEAINWLKE QFSYLGNLRFTEEEIEYLKQEIPYLPSAYIKYISSSNYKLHPEEQISFTSEEIEGKPTHYKLKILVSGSWKDTIL YEIPLLSLISEAYFKFVDIDWDYENQLEQAEKKAETLFDNGIRFSEFGTRRRRSLKAQDLIMQGIMKAVN GNPDRNKSLLLGTSNILFAKKYGVKPIGTVAHEWVMGVASISEDYLHANKNAMDCWINTFGAKNAG LALTDTFGTDDFLKSFRPPYSDAYVGVRQDSGDPVEYTKKISHHYHDVLKLPKFSKIICYSDSLNVEKAIT YSHAAKENGMLATFGIGTNFTNDFRKKSEPQVKSEPLNIVIKLLEVNGNHAIKISDNLGKNMGDPATV KRVKEELGYTERSWSGDNEAHRWT

#### >DM validata146

MVAESNSAVAPTANVATSPAHEHFVRVNGGHFELQGKPYVITGVNMWYAAYLGAPNEVGDRDRL AKELDNLKAIGVNNLRVLAVSEKSEINSAVKPAVTNGFGNYDETLLQGLDYLLVELAKRDMTVVLYFN NFWQWSGGMTQYMAWIEGEPVQDPNVTNEWEAFMAKSASFYRSEKAQQEYRKTLEKIITRVNSIN GKAYVDDATIMSWQLANEPRPGNSQTTAEEKQIYIDWVHAAAAYIKTLDAHHLVSSGSEGEMGSVN DMQVFIDAHATPDIDYLTYHMWIRNWSWFDKTKPAETWPSAWEKAQNYMRAHIDVAKQLNKPLV LEEFGLDRDMGSYAMDSTTEYRDNYFRGVFELMLASLEQGEPSAGYNIWAWNGYGRTTRANYWW QEGDDFMGDPPQEEQGMYGVFDTDTSTIAIMKEFNARFQPKLEHHHHHH

MAVTKSSSLIVGAGTWGTSTALHLARRGYTNVTVLDPYPVPSAISAGNDVNKVISSGQYSNNKDEIE VNEILAEEAFNGWKNDPLFKPYYHDTGLLMSACSQEGLDRLGVRVRPGEDPNLVELTRPEQFRKLAPE GVLQGDFPGWKGYFARSGAGWAHARNALVAAAREAQRMGVKFVTGTPQGRVVTLIFENNDVKGA VTADGKIWRAERTFLCAGASAGQFLDFKNQLRPTAWTLVHIALKPEERALYKNIPVIFNIERGFFFEPDE ERGEIKICDEHPGYTNMVQSADGTMMSIPFEKTQIPKEAETRVRALLKETMPQLADRPFSFARICWCA DTANREFLIDRHPQYHSLVLGCGASGRGFKYLPSIGNLIVDAMEGKVPQKIHELIKWNPDIAANRNW RDTLGRFGGPNRVMDFHDVKEWTNVQYRDISKL

#### >DM validata148

MADDPSAADRNVEIWKIKKLIKSLEAARGNGTSMISLIIPPKDQISRVAKMLADEFGTASNIKSRVNRLS VLGAITSVQQRLKLYNKVPPNGLVVYCGTIVTEEGKEKKVNIDFEPFKPINTSLYLCDNKFHTEALTALLS DDSKFGFIVIDGSGALFGTLQGNTREVLHKFTVDLPKKHGRGGQSALRFARLRMEKRHNYVRKVAET AVQLFISGDKVNVAGLVLAGSADFKTELSQSDMFDQRLQSKVLKLVDISYGGENGFNQAIELSTEVLS NVKFIQEKKLIGRYFDEISQDTGKYCFGVEDTLKALEMGAVEILIVYENLDIMRYVLHCQGTEEEKILYLT PEQEKDKSHFTDKETGQEHELIESMPLLEWFANNYKKFGATLEIVTDKSQEGSQFVKGFGGIGGILRYR VDFQGMEYQGGDDEFFDLDDY

# >DM\_validata149

GMNFPIDEKLIREKQNELHIKDLGMASIRDLVALVTNLEKATGTKFCRMEMGVPGLPAPQIGIETEIQKL REGVASIYPNLDGLPELKQEASRFAKLFVNIDIPARACVPTVGSMQGCFVSFLVANRTHKNREYGTLFI DPGFNLNKLQCRILGQKFESFDLFEYRGEKLREKLESYLQTGQFCSIIYSNPNNPTWQCMTDEELRIIGE LATKHDVIVIEDLAYFGMDFRKDYSHPGEPLYQPSVANYTDNYILALSSSKAFSYAGQRIGVLMISGKL YEREYPDLEESFGRLRFGEALSSSALYALSSGATHSAQWGMAAMLKACNDGEYNFRDSVIEYGRKARI MKKMFLDNGFNIVYDKDGNEPLADGFYFTVGYKGMDSSKLIEKFVRYGMCAITLKTTGSKRNEAMRI CTSLLPESQFPDLEKRLQMLNAEG

SPAIMLQRDFITALPARGLDHIAENILSYLDAKSLCAAELVCKEWYRVTSDGMLWKKLIERMVRTDSL WRGLAERRGWGQYLFKNKPPDGNAPPNSFYRALYPKIIQDIETIESNWRCGRHSLQRIHCRSETSKGV YCLQYDDQKIVSGLRDNTIKIWDKNTLECKRILTGHTGSVLCLQYDERVIITGSSDSTVRVWDVNTGE MLNTLIHHCEAVLHLRFNNGMMVTCSKDRSIAVWDMASPTDITLRRVLVGHRAAVNVVDFDDKYIV SASGDRTIKVWNTSTCEFVRTLNGHKRGIACLQYRDRLVVSGSSDNTIRLWDIECGACLRVLEGHEEL VRCIRFDNKRIVSGAYDGKIKVWDLVAALDPRAPAGTLCLRTLVEHSGRVFRLQFDEFQIVSSSHDDTI LIWDFLNDPAAQAEPPRSPSRTYTYISR

### >DM\_validata152

MVVMIKLRDELGTATTDSAQKILLLGSGELGKEIAIEAQRLGVEVVAVDRYANAPAMQVAHRSYVGN MMDKDFLWSVVEREKPDAIIPEIEAINLDALFEFEKDGYFVVPNARATWIAMHRERLRETLVKEAKVPT SRYMYATTLDELYEACEKIGYPCHTKAIMSSSGKGSYFVKGPEDIPKAWEEAKTKARGSAEKIIVEEHIDF DVEVTELAVRHFDENGEIVTTFPKPVGHYQIDGDYHASWQPAEISEKAEREVYRIAKRITDVLGGLGIF GVEMFVKGDKVWANEVSPRPHDTGMVTLASHPPGFSEFALHLRAVLGLPIPGEWVDGYRLFPMLIPA ATHVIKAKVSGYSPRFRGLVKALSVPNATVRLFGKPEAYVGRRLGIALAWDKDVEVAKRKAEMVAHM IELRTRSSDWHDQNYEKRKHLLR

#### >DM validata153

FVRKTNKNRDMPLDSDVFRVPPGYNAPQQVHITQGDLVGRAMIISWVTMDEPGSSAVRYWSEKNG RKRIAKGKMSTYRFFNYSSGFIHHTTIRKLKYNTKYYYEVGLRNTTRRFSFITPPQTGLDVPYTFGLIGDL GQSFDSNTTLSHYELSPKKGQTVLFVGDLSYADRYPNHDNVRWDTWGRFTERSVAYQPWIWTAGN HEIEFAPEINETEPFKPFSYRYHVPYEASQSTSPFWYSIKRASAHIIVLSSYSAYGRGTPQYTWLKKELRKV KRSETPWLIVLMHSPLYNSYNHHFMEGEAMRTKFEAWFVKYKVDVVFAGHVHAYERSERVSNIAYKI TDGLCTPVKDQSAPVYITIGDAGNYGVIDSNMIQPQPEYSAFREASFGHGMFDIKNRTHAHFSWNR NQDGVAVEADSVWFFNRHWYPVDDST

>DM validata154

GSHMTIQKVHGREVLDSRGNPTVEVEVTTEKGVFRSAVPSGASTGVYEACELRDGDKKRYVGKGCLQ AVKNVNEVIGPALIGRDELKQEELDTLMLRLDGTPNKGKLGANAILGCSMAISKAAAAAKGVPLYRYL ASLAGTKELRLPVPCFNVINGGKHAGNALPFQEFMIAPVKATSFSEALRMGSEVYHSLKGIIKKKYGQD AVNVGDEGGFAPPIKDINEPLPILMEAIEEAGHRGKFAICMDCAASETYDEKKQQYNLTFKSPEPTWV TAEQLRETYCKWAHDYPIVSIEDPYDQDDFAGFAGITEALKGKTQIVGDDLTVTNTERIKMAIEKKACN SLLLKINQIGTISEAIASSKLCMENGWSVMVSHRSGETEDTYIADLVVALGSGQIKTGAPCRGERTAKL NOLLRIEEELGAHAKFGFPGWS

>DM validata155

GMMVPHLTTALTGPLLTLEKRLLDNMPRIEHWFRSQWQEYGAPFYASVDLRNAGFKLAPVDTNLFP GGFNNLNPDFLPLCIQAAMVAVEKICPDARRLLLIPENHTRNTFYLRNVHALTHILRQAGLEVRIGSIAP EITAPTFLETHDGHSILLEPVRRKANRLELDNFDSCAILLNNDLSGGIPDILQGLEQSLIPPLHAGWATRR KSNHFTAYDRVVEEFAPLIDIDPWLLNPYFDTCGGLDFHARLGEEQLAEKVDSLLAKIRRKYAEYGVKQ EPFVIVKADAGTYGMGIMTVKSADDVRDLNRKQRNKMSVVKEGLKVSEVILQEGVYTFEHLKDAVAE PVIYMMDHFVVGGFYRVHTSRGADENLNAPGMHFEPLTFETPCSTPDCAGAPDAAPNRFYAYGVV ARLALLAATIELOETDPDLLDERT

>DM validata156

MSNVQTSAEREIVDLSHLAFDCGMLGRLKTVSWTPVIAGDSFELDAVGALRLSPLRRGLAIDSKVDFFT FYIPHRHVYGDQWIQFMRDGVNAQPLPSVTCNRYPDHAGYVGTIVPANNRIPKFLHQSYLNIYNNY FRAPWMPERTEANPSNLNEDDARYGFRCCHLKNIWSAPLPPETKLAEEMGIESNSIDIMGLQAAYAQ LHTEQERTYFMQRYRDVISSFGGSTSYDADNRPLLVMHTDFWASGYDVDGTDQSSLGQFSGRVQQ TFKHSVPRFFVPEHGVMMTLALIRFPPISPLEHHYLAGKSQLTYTDLAGDPALIGNLPPREISYRDLFRD GRSGIKIKVAESIWYRTHPDYVNFKYHDLHGFPFLDDAPGTSTGDNLQEAILVRHQDYDACFQSQQL LQWNKQARYNVSVYRHMPTVRDSIMTS

>DM validata157

MAKHVVVIGGGVGGIATAYNLRNLMPDLKITLISDRPYFGFTPAFPHLAMGWRKFEDISVPLAPLLPKF NIEFINEKAESIDPDANTVTTQSGKKIEYDYLVIATGPKLVFGAEGQEENSTSICTAEHALETQKKLQELY ANPGPVVIGAIPGVSCFGPAYEFALMLHYELKKRGIRYKVPMTFITSEPYLGHFGVGGIGASKRLVEDLF AERNIDWIANVAVKAIEPDKVIYEDLNGNTHEVPAKFTMFMPSFQGPEVVASAGDKVANPANKMVI VNRCFQNPTYKNIFGVGVVTAIPPIEKTPIPTGVPKTGMMIEQMAMAVAHNIVNDIRNNPDKYAPRL SAICIADFGEDAGFFFADPVIPPRERVITKMGKWAHYFKTAFEKYFLWKVRNGNIAPSFEEKVLEIFLKV HPIELCKDCEGAPGSRC

#### >DM validata158

GSSMANNALQTIINARLPGEEGLWQIHLQDGKISAIDAQSGVMPITENSLDAEQGLVIPPFVEPHIHL DTTQTAGQPNWNQSGTLFEGIERWAERKALLTHDDVKQRAWQTLKWQIANGIQHVRTHVDVSDA TLTALKAMLEVKQEVAPWIDLQIVAFPQEGILSYPNGEALLEEALRLGADVVGAIPHFEFTREYGVESLH KTFALAQKYDRLIDVHCDEIDDEQSRFVETVAALAHHEGMGARVTASHTTAMHSYNGAYTSRLFRLL KMSGINFVANPLVNIHLQGRFDTYPKRRGITRVKEMLESGINVCFGHDGVFDPWYPLGTANMLQVL HMGLHVCQLMGYGQINDGLNLITHHSARTLNLQDYGIAAGNSANLIILPAENGFDALRRQVPVRYS VRGGKVIASTOPAOTTVYLEOPEAIDYKR

#### >DM validata159

MESKAKTTVTFHSGILTIGGTVIEVAYKDAHIFFDFGTEFRPELDLPDDHIETLINNRLVPELKDLYDPRLG YEYHGAEDKDYQHTAVFLSHAHLDHSRMINYLDPAVPLYTLKETKMILNSLNRKGDFLIPSPFEEKNFT REMIGLNKNDVIKVGEISVEIVPVDHDAYGASALLIRTPDHFITYTGDLRLHGHNREETLAFCEKAKHTE LLMMEGVSISFPEREPDPAQIAVVSEEDLVQHLVRLELENPNRQITFNGYPANVERFAKIIEKSPRTVVL EANMAALLLEVFGIEVRYYYAESGKIPELNPALEIPYDTLLKDKTDYLWQVVNQFDNLQEGSLYIHSDA QPLGDFDPQYRVFLDLLAKKDITFVRLACSGHAIPEDLDKIIALIEPQVLVPIHTLKPEKLENPYGERILPE RGEQIVL

# >DM validata160

EGDVESIEKFLSTFKILPPLRDYKEFGPIQEIVRSPNMGNLRGKLIATLMENEPNSITSSAVSPGETPYLITG SDQGVIKIWNLKEIIVGEVYSSSLTYDCSSTVTQITMIPNFDAFAVSSKDGQIIVLKVNHYQQESEVKFL

### >DM validata161

MKFTNLTAKEFGAFTDSMPYSHFTQTVGHYELKLAEGYETHLVGIKNNNNEVIAACLLTAVPVMKVFK YFYSNRGPVIDYENQELVHFFFNELSKYVKKHRCLYLHIDPYLPYQYLNHDGEITGNAGNDWFFDKMS NLGFEHTGFHKGFDPVLQIRYHSVLDLKDKTADDIIKNMDGLRKRNTKKVKKNGVKVRFLSEEELPIFR SFMEDTSESKAFADRDDKFYYNRLKYYKDRVLVPLAYINFDEYIKELNEERDILNKDLNKALKDIEKRPE NKKAHNKRDNLQQQLDANEQKIEEGKRLQEEHGNELPISAGFFFINPFEVVYYAGGTSNAFRHFAGS YAVQWEMINYALNHGIDRYNFYGVSGKFTEDAEDAGVVKFKKGYNAEIIEYVGDFIKPINKPVYAAYT ALKKVKDRIFHHHHHH

### >DM\_validata163

MKTVVIGAGLGGLLSAARLSKAGHEVEVFERLPITGGRFTNLSYKGFQLSSGAFHMLPNGPGGPLACF LKEVEASVNIVRSEMTTVRVPLKKGNPDYVKGFKDISFNDFPSLLSYKDRMKIALLIVSTRKNRPSGSSL QAWIKSQVSDEWLIKFADSFCGWALSLKSDEVPVEEVFEIIENMYRFGGTGIPEGGCKGIIDALETVISA NGGKIHTGQEVSKILIENGKAAGIIADDRIHDADLVISNLGHAATAVLCSEALSKEADAAYFKMVGTLQ PSAGIKICLAADEPLVGHTGVLLTPYTRRINGVNEVTQADPELAPPGKHLTMCHQYVAPENVKNLESEI EMGLEDLKEIFPGKRYEVLLIQSYHDEWPVNRAASGTDPGNETPFSGLYVVGDGAKGKGGIEVEGVAL GVMSVMEKVLG

### >DM\_validata165

FRRKEDLDPPLALLPLKGLREAAALLEEALRQGKRIRVHGDYDADGLTGTAILVRGLAALGADVHPFIP HRLEEGYGVLMERVPEHLEASDLFLTVDCGITNHAELRELLENGVEVIVTDHHTPGKTPPPGLVVHPAL TPDLKEKPTGAGVAFLLLWALHERLGLPPPLEYADLAAVGTIADVAPLWGWNRALVKEGLARIPASS WVGLRLLAEAVGYTGKAVEVAFRIAPRINAASRLGEAEKALRLLLTDDAAEAQALVGELHRLNARRQT LEEAMLRKLLPQADPEAKAIVLLDPEGHPGVMGIVASRILEATLRPVFLVAQGKGTVRSLAPISAVEALR

SAEDLLLRYGGHKEAAGFAMDEALFPAFKARVEAYAARFPDPVREVALLDLLPEPGLLPQVFRELALLE PYGEGNPEPLFL

#### >DM validata166

SKSKPDTSAPTSPKVTYKAPVPSGEVYFADSFDRGTLSGWILSKAKKDDTDDEIAKYDGKWEVDEMKE TKLPGDKGLVLMSRAKHHAISAKLNKPFLFDTKPLIVQYEVNFQNGIECGGAYVKLLSKTPELNLDQFH DKTPYTIMFGPDKCGEDYKLHFIFRHKNPKTGVYEEKHAKRPDADLKTYFTDKKTHLYTLILNPDNSFEI LVDQSIVNSGNLLNDMTPPVNPSREIEDPEDQKPEDWDERPKIPDPDAVKPDDWNEDAPAKIPDEE ATKPDGWLDDEPEYVPDPDAEKPEDWDEDMDGEWEAPQIANPKCESAPGCGVWQRPMIDNPNY KGKWKPPMIDNPNYQGIWKPRKIPNPDFFEDLEPFKMTPFSAIGLELWSMTSDIFFDNFIVCGDRRVVDDWANDGWGLKKAADGAAEP

### >DM validata167

MGFKLVGFSKFVRKNPKSDKFKVKRFHHIEFWCGDATNVARRFSWGLGMRFSAKSDLSTGNMVHAS YLLTSGDLRFLFTAPYSPSLSAGEIKPTTTASIPSFDHGSCRSFFSSHGLGVRAVAIEVEDAESAFSISVAN GAIPSSPPIVLNEAVTIAEVKLYGDVVLRYVSYKAEDTEKSEFLPGFERVEDASSFPLDYGIRRLDHAVGN VPELGPALTYVAGFTGFHQFAEFTADDVGTAESGLNSAVLASNDEMVLLPINEPVHGTKRKSQIQTYL EHNEGAGLQHLALMSEDIFRTLREMRKRSSIGGFDFMPSPPPTYYQNLKKRVGDVLSDDQIKECEELGI LVDRDDQGTLLQIFTKPLGDRPTIFIEIIQRVGCMMKDEEGKAYQSGGCGGFGKGNFSELFKSIEEYEKT LEAKOLVG

### >DM validata169

MKKVMLATALFLGLTPAGANAADLGHQTLGSNDGWGAYSTGTTGGSKASSSNVYTVSNRNQLVSA LGKETNTTPKIIYIKGTIDMNVDDNLKPLGLNDYKDPEYDLDKYLKAYDPSTWGKKEPSGTQEEARARS QKNQKARVMVDIPANTTIVGSGTNAKVVGGNFQIKSDNVIIRNIEFQDAYDYFPQWDPTDGSSGN WNSQYDNITINGGTHIWIDHCTFNDGSRPDSTSPKYYGRKYQHHDGQTDASNGANYITMSYNYYH DHDKSSIFGSSDSKTSDDGKLKITLHHNRYKNIVQKAPRVRFGQVHVYNNYYEGSTSSSSYPFSYAWG IGKSSKIYAQNNVIDVPGLSAAKTISVFSGGTALYDSGTLLNGTQINASAANGLSSSVGWTPSLHGSID ASANVKSNVINQAGAGKLN

#### >DM validata170

MQEGAYRFIRNPNVSAEAIRKAGAMQTVKLAQEFPELLAIEDTTSLSYRHQVAEELGKLGSIQDKSRG WWVHSVLLEATTFRTVGLLHQEWWMRPDDPADADEKESGKWLAAAATSRLRMGSMMSNVIAV CDREADIHAYLQDKLAHNERFVVRSKHPRKDVESGLYLYDHLKNQPELGGYQISIPQKGVVDKRGKR KNRPARKASLSLRSGRITLKQGNITLNAVLAEEINPPKGETPLKWLLLTSEPVESLAQALRVIDIYTHRWR IEEFHKAWKTGAGAERQRMEEPDNLERMVSILSFVAVRLLQLRESFTLPQALRAQGLLKEAEHVESQS AETVLTPDECQLLGYLDKGKRKRKEKGSLQWAYMAIARLGGFMDSKRTGIASWGALWEGWEALQSK LDGFLAAKDLMAOGIKI

### >DM validata171

MELADVGAAASSQGVHDQVLPTPNASSRVIVHVDLDCFYAQVEMISNPELKDKPLGVQQKYLVVTC NYEARKLGVKKLMNVRDAKEKCPQLVLVNGEDLTRYREMSYKVTELLEEFSPVVERLGFDENFVDLTE MVEKRLQQLQSDELSAVTVSGHVYNNQSINLLDVLHIRLLVGSQIAAEMREAMYNQLGLTGCAGVA SNKLLAKLVSGVFKPNQQTVLLPESCQHLIHSLNHIKEIPGIGYKTAKCLEALGINSVRDLQTFSPKILEKE LGISVAQRIQKLSFGEDNSPVILSGPPQSFSEEDSFKKCSSEVEAKNKIEELLASLLNRVCQDGRKPHTV RLIIRRYSSEKHYGRESRQCPIPSHVIQKLGTGNYDVMTPMVDILMKLFRNMVNVKMPFHLTLLSVCF CNLKALNTAK

# >DM\_validata173

EETIPLQTLRCYNDYTSHITCRWADTQDAQRLVNVTLIRRVNEDLLEPVSCDLSDDMPWSACPHPRC VPRRCVIPCQSFVVTDVDYFSFQPDRPLGTRLTVTLTQHVQPPEPRDLQISTDQDHFLLTWSVALGSP QSHWLSPGDLEFEVVYKRLQDSWEDAAILLSNTSQATLGPEHLMPSSTYVARVRTRLAPGSRLSGRPS KWSPEVCWDSQPGDEAQPQNLECFFDGAAVLSCSWEVRKEVASSVSFGLFYKPSPDAGSAVLLREEE CSPVLREGLGSLHTRHHCQIPVPDPATHGQYIVSVQPRRAEKHIKSSVNIQMAPPSLQVTKDGDSYSL RWETMKMRYEHIDHTFEIQYRKDTATWKDSKTETLQNAHSMALPALEPSTRYWARVRVRTSRTGYN GIWSFWSFARSWDTF

#### >DM validata175

MDTAGDTKTTDDGGVVNITYMHRLPDSEGMTLVNDIVAKWNKQHPDIQVKATKFDGKASDMIKKL ETDVKSGEAPDLAQVGYAELPEVFTKGLLQDVTQYAEQYKNDFASGPYSLVQVGGKAYGLPQDTGP LVYFYNKAEFEKLGITEIPQTADEFIAAAKTAAAAGKYIMSYQPDEAGNMISGLAGASGGWYKVKGDS WVVNTETDGSKATADFYQQLLDAKAATTNPRWDPSFDASIKDGSLIGTVAAAWEAPLFMTSSGGTG SGEWQVAQLGDWFGNAGKTGPDGGSAVAVLKNSKHPKEAMEFLDWFNTQVPDLVSQGLVPAAT TEDAETPSEWSTFFGGQDIMKEFKTANNNMGDFTYMPGFSAVAAKMNETAAKATDGSGKVADIFS DAQTTSVDTLKNFGLSVSE

### >DM\_validata176

MEFTTGLMSLDTALNEMLSRVTPLTAQETLPLVQCFGRILASDVVSPLDVPGFDNSAMDGYAVRLAD IASGQPLPVAGKSFAGQPYHGEWPAGTCIRIMTGAPVPEGCEAVVMQEQTEQMDNGVRFTAEVRS GQNIRRRGEDISAGAVVFPAGTRLTTAELPVIASLGIAEVPVIRKVRVALFSTGDELQLPGQPLGDGQIY DTNRLAVHLMLEQLGCEVINLGIIRDDPHALRAAFIEADSQADVVISSGGVSVGEADYTKTILEELGEIA FWKLAIKPGKPFAFGKLSNSWFCGLPGNPVSATLTFYQLVQPLLAKLSGNTASGLPARQRVRTASRLK KTPGRLDFQRGVLQRNADGELEVTTTGHQGSHIFSSFSLGNCFIVLERDRGNVEVGEWVEVEPFNALF GGI

#### >DM validata177

QSEPELKLESVVIVSRHGVRAPTKATQLMQDVTPDAWPTWPVKLGWLTPRGGELIAYLGHYQRQRL VADGLLAKKGCPQSGQVAIIADVDERTRKTGEAFAAGLAPDCAITVHTQADTSSPDPLFNPLKTGVC QLDNANVTDAILSRAGGSIADFTGHRQTAFRELERVLNFPQSNLCLKREKQDESCSLTQALPSELKVS ADNVSLTGAVSLASMLTEIFLLQQAQGMPEPGWGRITDSHQWNTLLSLHNAQFYLLQRTPEVARSR ATPLLDLIKTALTPHPPQKQAYGVTLPTSVLFIAGHDTNLANLGGALELNWTLPGQPDNTPPGGELVF ERWRRLSDNSQWIQVSLVFQTLQQMRDKTPLSLNTPPGEVKLTLAGCEERNAQGMCSLAGFTQIVN EARIPACSL

#### >DM\_validata178

LNSAAQAQSSDPVVIGCPAPLTGIVAADGIEFQRGIQMAADEINAVGGILGRPIELVFADTQSKGVDV VIQSAQRLIDRDNASALIAGYNLENGTALHDVAADAGVIAMHANTVAVHDEMVKSDPDRYWGTFQ YDPPETLYGGGFLKFLKDIEDNGEFSRPNNKIAIITGPGIYSVNIANAIRDGAGEYGYDVSLFETVAIPVS DWGPTLAKLRADPPAVIVVTHFYPQDQALFMNQFMTDPTNSLVYLQYGASLAAFRDIAGDNSVGV TYATVLGTLQDEMGDAFAKAYKERYGDLSSTASGCQTYSALYAYSIAAALAGGPGAPYDDVQNKAV ADRLRSLIFRGPVGTMRFHADTQSAWSYPTETNDPSLGMPHIFSQIFDKAEDGVLIAPAPYKKAGFKM PPWMKG

#### >DM validata179

# >DM validata181

>DM\_validata183

MSYYHHHHHHDYDPTTENLYFOGPAVGIDLGTTYSCVGVFOHGKVEIIANDOGNRTTPSYVAFTDT

ERLIGDAAKNQVAMNPTNTVFDAKRLIGRRFDDAVVQSDMKHWPFMVVNDAGRPKVQVEYKGET KSFYPEEVSSMVLTKMKEIAEAYLGKTVTNAVVTVPAYFNDSQRQATKDAGTIAGLNVLRIINEPTAAA IAYGLDKKVGAERNVLIFDLGGGTFDVSILTIEDGIFEVKSTAGDTHLGGEDFDNRMVNHFIAEFKRKHK KDISENKRAVRRLRTACERAKRTLSSSTQASIEIDSLYEGIDFYTSITRARFEELNADLFRGTLDPVEKALR DAKLDKSQIHDIVLVGGSTRIPKIQKLLQDFFNGKELNKSINPDEAVAYGAAVQAAILS

### >DM validata184

### >DM\_validata185

# >DM\_validata186

GMVEPMTPRFKYTKASQENIQQLGNILEQCFVMSFGDSEIYVKGIGLENFRVIYREQKVAGGLAILPM GQWWGGQRVPMAGIAAVGIAPEYRGDGAAIALIQHTLQEISEQDIPISVLYPATQRLYRKAGYEQAG SSCVWEIPTDSIQIQHASLPLEPVVLKNNPIFHELYQQQAQLTHGYLDRHPAIWQGLNRTLDTETLYS YLIGDKDKPQGYIIFTQERTRDGSILRIRDWVTLSNPAVQSFWTFIANHRSQIDKVTWKSSVIDALTLLL PEQSATIRSQDRWMLRIVNVCKALEARGYPLGVEAELHLEVQDDLLATNQGKFILSVANGKSEVTKG GKGELQLDIKGLASLYTSLFTPROLOLTGKLQATETALLKATQIFAGESPWMIDFF

### >DM validata187

### >DM\_validata188

#### >DM validata189

#### >DM validata190

MTAAQGNSNETLFSSYKMGRFDLSHRVVLAPMTRCRALNGVPNAALAEYYAQRTTPGGFLISEGTM VSPGSAGFPHVPGIYSDEQVEAWKQVVEAVHAKGGFIFCQLWHVGRASHAVYQPNGGSPISSTNKP ISENRWRVLLPDGSHVKYPKPRALEASEIPRVVEDYCLSALNAIRAGFDGIEIHGAHGYLIDQFLKDGIN DRTDQYGGSIANRCRFLKQVVEGVVSAIGASKVGVRVSPAIDHLDATDSDPLSLGLAVVGMLNKLQG VNGSKLAYLHVTQPRYHAYGQTESGRQGSDEEEAKLMKSLRMAYNGTFMSSGGFNKELGMQAVQ QGDADLVSYGRLFIANPDLVSRFKIDGELNKYNRKTFYTQDPVVGYTDYPFLAPFSRL

#### >DM\_validata192

MAIVVDDSVFSPSYVPKRLPHREQQLQQLDILLGNWLRNPGHHYPRATLLGRPGTGKTVTLRKLWEL YKDKTTARFVYINGFIYRNFTAIIGEIARSLNIPFPRRGLSRDEFLALLVEHLRERDLYMFLVLDDAFNLAP DILSTFIRLGQEADKLGAFRIALVIVGHNDAVLNNLDPSTRGIMGKYVIRFSPYTKDQIFDILLDRAKAGL AEGSYSEDILQMIADITGAQTPLDTNRGDARLAIDILYRSAYAAQQNGRKHIAPEDVRKSSKEVLFGISE EVLIGLPLHEKLFLLAIVRSLKISHTPYITFGDAEESYKIVCEEYGERPRVHSQLWSYLNDLREKGIVETRQ NKRGEGVRGRTTLISIGTEPLDTLEAVITKLIKEELR

### >DM validata193

MVEATAQETDRPRFSFSIAAREGKARTGTIEMKRGVIRTPAFMPVGTAATVKALKPETVRATGADIILG NTYHLMLRPGAERIAKLGGLHSFMGWDRPILTDSGGFQVMSLSSLTKQSEEGVTFKSHLDGSRHMLS PERSIEIQHLLGSDIVMAFDECTPYPATPSRAASSMERSMRWAKRSRDAFDSRKEQAENAALFGIQQ GSVFENLRQQSADALAEIGFDGYAVGGLAGGEGQDEMFRVLDFSVPMLPDDKPHYLMGVGKPDDI VGAVERGIDMFDCVLPTRSGRNGQAFTWDGPINIRNARFSEDLKPLDSECHCAVCQKWSRAYIHHLI RAGEILGAMLMTEHNIAFYQQLMQKIRDSISEGRFSQFAQDFRARYFARNS

#### >DM\_validata194

MGSHQERPLIGLLFSETGVTADIERSQRYGALLAVEQLNREGGVGGRPIETLSQDPGGDPDRYRLCAE DFIRNRGVRFLVGCYMSHTRKAVMPVVERADALLCYPNPYEGFEYSPNIVYGGPAPNQNSAPLAAYL IRHYGERVVFIGSDYIYPRESNHVMRHLYRQHGGTVLEEIYIPLYPSDDDLQRAVERIYQARADVVFST

VVGTGTAELYRAIARRYGDGRRPPIASLTTSEAEVAKMESDVAEGQVVVAPYFSSIDTPASRAFVQAC HGFFPENATITAWAEAAYWQTLLLGRAAQAAGNWRVEDVQRHLYDIDIDAPQGPVRVERQNNHS RLSSRIAEIDARGVFQVRWQSPEPIRPDPYVVVHNLDDWSASMGGGPLP

### >DM\_validata196

MTRRPDRKDVATVDELHASATKLVGLDDFGTDDDNYREALGVLLDAYQGEAGLTVLGSKMNRFFLR GALVARLLSQSAWKQYPEHVDVAIKRPIFVTGLVRTGTTALHRLLGADPAHQGLHMWLAEYPQPRP PRETWESNPLYRQLDADFTQHHAENPGYTGLHFMAAYELEECWQLLRQSLHSVSYEALAHVPSYAD WLSRQDWTPSYCRHRRNLQLIGLNDAEKRWVLKNPSHLFALDALMATYPDALVVQTHRPVETIMAS MCSLAQHTTEGWSTKFVGAQIGADAMDTWSRGLERFNAARAKYDSAQFYDVDYHDLIADPLGTVA DIYRHFGLTLSDEARQAMTTVHAESQSGARAPKHSYSLADYGLTVEMVKERFAGL

# >DM\_validata197

LTLGLAPALSTHSSGVSTQSVDLSQIKRGDEIQAHCLTPAETEVTECAGILKDVLSKNLHELQGLCNVK NKMGVPWVSVEELGQEIITGRLPFPSVGGTPVNDLVRVLVVAESNTPEETPEEEFYAYVELQTELYTFG LSDDNVVFTSDYMTVWMIDIPKSYVDVGMLTRATFLEQWPGAKVTVMIPYSSTFTWCGELGAISEES APQPSLSARSPVCKNSARYSTSKFCEVDGCTAETGMEKMSLLTPFGGPPQQAKMNTCPCYYKYSVSP LPAMDHLILADLAGLDSLTSPVYVMAAYFDSTHENPVRPSSKLYHCALQMTSHDGVWTSTSSEQCPI RLVEGQSQNVLQVRVAPTSMPNLVGVSLMLEGQQYRLEYFGDH

### >DM\_validata198

DFDVKRKYFRQELERLDEGLRKEDMAVHVRRDHVFEDSYRELHRKSPEEMKNRLYIVFEGEEGQDAG GLLREWYMIISREMFNPMYALFRTSPGDRVTYTINPSSHANPNHLSYFKFVGRIVAKAVYDNRLLECYF TRSFYKHILGKSVRYTDMESEDYHFYQGLVYLLENDVSTLGYDLTFSTEVQEFGVAEVRDLKPNGANIL VTEENKKEYVHLVCQMRMTGAIRKQLAAFLEGFYEIIPKRLISIFTEQELELLISGLPTIDIDDLKSNTEYHK YQSNSIQIQWFWRALRSFDQADRAKFLQFVTGTSKVPLQGFAALEGMNGIQKFQIHRDDRSTDRLPS AHTCFNQLDLPAYESFEKLRHMLLLAIQEASEGFGLA

### >DM\_validata200

NSSPSPVPGSQNVPAPAVKKISQYACQRRTTLNNYNQLFTDALDILAENDELRENEGSCLAFMRASS VLKSLPFPITSMKDTEGIPCLGDKVKSIIEGIIEDGESSEAKAVLNDERYKSFKLFTSVFGVGLKTAEKWFR MGFRTLSKIQSDKSLRFTQMQKAGFLYYEDLVSCVNRPEAEAVSMLVKEAVVTFLPDALVTMTGGFR RGKMTGHDVDFLITSPEATEDEEQQLLHKVTDFWKQQGLLLYCDILESTFEKFKQPSRKVDALDHFQK CFLILKLDHGRVHSEKSGQQEGKGWKAIRVDLVMCPYDRRAFALLGWTGSRQFERDLRRYATHERK MMLDNHALYDRTKRVFLEAESEEEIFAHLGLDYIEPWERNA

#### >DM validata201

LPVLAPVTKDPATSLYTIPFHDGASLVLDVAGPLVWSTCDGGQPPAEIPCSSPTCLLANAYPAPGCPA PSCGSDKHDKPCTAYPYNPVSGACAAGSLSHTRFVANTTDGSKPVSKVNVGVLAACAPSKLLASLPR GSTGVAGLANSGLALPAQVASAQKVANRFLLCLPTGGPGVAIFGGGPVPWPQFTQSMPYTPLVTKG GSPAHYISARSIVVGDTRVPVPEGALATGGVMLSTRLPYVLLRPDVYRPLMDAFTKALAAQHANGAP VARAVEAVAPFGVCYDTKTLGNNLGGYAVPNVQLGLDGGSDWTMTGKNSMVDVKQGTACVAFV EMKGVAAGDGRAPAVILGGAQMEDFVLDFDMEKKRLGFSRLPHFTGCGGL

# >DM\_validata202

AHSDASSDITLKVAIYPYVPDPARFQAAVLDQWQRQEPGVKLEFTDWDSYSADPPDDLDVFVLDSIF LSHFVDAGYLLPFGSQDIDQAEDVLPFALQGAKRNGEVYGLPQILCTNLLFYRKGDLKIGQVDNIYELY KKIGTSHSEQIPPPQNKGLLINMAGGTTKASMYLEALIDVTGQYTEYDLLPPLDPLNDKVIRGLRLLINM AGEKPSQYVPEDGDAYVRASWFAQGSGRAFIGYSESMMRMGDYAEQVRFKPISSSAGQDIPLFYSD VVSVNSKTAHPELAKKLANVMASADTVEQALRPQADGQYPQYLLPARHQVYEALMQDYPIYSELA OIVNKPSNRVFRLGPEVRTWLKDAKQVLPEALGLTDVSSLAS

>DM validata203

GMHSALQLRSRIKSSGELELSLDSIDTPHPGPDEVLIRIEASPLNPSDLGLLFGAADMSTAKASGTAERPI VTARVPEGAMRSMAGRLDASMPVGNEGAGVVVEAGSSPAAQALMGKTVAAIGGAMYSQYRCIPA DQCLVLPEGATPADGASSFVNPLTALGMVETMRLEGHSALVHTAAASNLGQMLNQICLKDGIKLVNI VRKQEQADLLKAQGAVHVCNAASPTFMQDLTEALVSTGATIAFDATGGGKLGGQILTCMEAALNKS AREYSRYGSTTHKQVYLYGGLDTSPTEFNRNFGMAWGMGGWLLFPFLQKIGRERANALKQRVVAEL KTTFASHYSKEISLAEVLDLDMIAVYNKRATGEKYLINPNKGLAG

#### >DM\_validata204

ATPVTPYYGPGHITFDWCGFGDSRSDCTNPQSPMSLDIPQQLCPKFSSKSSSSMFLSLHWNNHSSFV SYDYFNCGVEKVFYEGVNFSPRKQYSCWDEGVDGWIELKTRFYTKLYQMATTSRCIKLIQLQAPSSLP TLQAGVCRTNKQLPDNPRLALLSDTVPTSVQFVLPGSSGTTICTKHLVPFCYLNHGCFTTGGSCLPFG VSYVSDSFYYGYYDATPQIGSTESHDYVCDYLFMEPGTYNASTVGKFLVYPTKSYCMDTMNITVPVQ AVQSIWSEQYASDDAIGQACKAPYCIFYNKTTPYTVTNGSDANHGDDEVRMMMQGLLRNSSCISP QGSTPLALYSTEMIYEPNYGSCPQFYKLFDTSGNENIDVISSS

## >DM\_validata205

MGSDKIHHHHHHMKVTVTTLELKDKITIASKALAKKSVKPILAGFLFEVKDGNFYICATDLETGVKATV NAAEISGEARFVVPGDVIQKMVKVLPDEITELSLEGDALVISSGSTVFRITTMPADEFPEITPAESGITFEV DTSLLEEMVEKVIFAAAKDEFMRNLNGVFWELHKNLLRLVASDGFRLALAEEQIENEEEASFLLSLKSM KEVQNVLDNTTEPTITVRYDGRRVSLSTNDVETVMRVVDAEFPDYKRVIPETFKTKVVVSRKELRESLK RVMVIASKGSESVKFEIEENVMRLVSKSPDYGEVVDEVEVQKEGEDLVIAFNPKFIEDVLKHIETEEIEM NFVDSTSPCQINPLDISGYLYIVMPIRLA

### >DM\_validata206

MEGGMKRVVLAFGTRPEATKMAPVYLALRGIPGLKPLVLLTGQHREQLRQALSLFGIQEDRNLDVMQ ERQALPDLAARILPQAARALKEMGADYVLVHGDTLTTFAVAWAAFLEGIPVGHVEAGLRSGNLKEPF PEEANRRLTDVLTDLDFAPTPLAKANLLKEGKREEGILVTGQTGVDAVLLAAKLGRLPEGLPEGPYVTV TMHRRENWPLLSDLAQALKRVAEAFPHLTFVYPVHLNPVVREAVFPVLKGVRNFVLLDPLEYGSMAA LMRASLLLVTDSGGLQEEGAALGVPVVVLRNVTERPEGLKAGILKLAGTDPEGVYRVVKGLLENPEELS

### RMRKAKNPYGDGKAGLMVARGVAWRLGLGPRPEDWLP

### >DM\_validata208

TAQTKNTQTLMPLTERVNVQADSARINQIIDGCWVAVGTNKPHAIQRDFTNLFDGKPSYRFELKTED NTLEGYAKGETKGRAEFSYCYATSDDFRGLPADVYQKAQITKTVYHHGKGACPQGSSRDYEFSVYIPS SLDSNVSTIFAQWHGMPDRTLVQTPQGEVKKLTVDEFVELEKTTFFKKNVGHEKVARLDKQGNPVK DKNGKPVYKAGKPNGWLVEQGGYPPLAFGFSGGLFYIKANSDRKWLTDKDDRCNANPGKTPVMKP LTSEYKASTIAYKLPFADFPKDCWITFRVHIDWTVYGKEAETIVKPGMLDVRMDYQEQGKKVSKHIVD NEKILIGRNDEDGYYFKFGIYRVGDSTVPVCYNLAGYSER

VCEKGFEAGDNKLGGALNAKHVEKYGDNFKNGMHKPEFHEDGLHKPMEVGGKKFESGFHYLLECHE LGGKNASGGYGGPLCEDPYGSEVQAMTEKLLKEADSDRTLCFNNFQDPCPQLTKEQVAMCKGFDY GDKTLKLPCGPLPWPAGLPEPGYVPKTNPLHGRWITVSGGQAAFIKEAIKSGMLGAAEANKIVADTD HHQTGGMYLRINQFGDVCTVDASVAKFARAKRTWKSGHYFYEPLVSGGNLLGVWVLPEEYRKIGFF WEMESGRCFRIERRAFPVGPYTFMRQATEVGGKISFVFYVKVSNDPESDPIPLQSRDYTALAGRDNAP TNLGKPYPTLAKDLDYPKKRDGWLEKNEKEMLRORNIVSSTF

MLSDYEEFLRLEKARKIILEILNEKGRDALYDLSGLSGGFLIDEKDKALLNTYIGSSYFAEKVNEYGLKHLG GDENDKCVGFNRTSSAILATILALKPKKVIHYLPELPGHPSIERSCKIVNAKYFESDKVGEILNKIDKDTLVI ITGSTMDLKVIELENFKKVINTAKNKEAIVFVDDASGARVRLLFNQPPALKLGADLVVTSTDKLMEGPR GGLLAGKKELVDKIYIEGTKFGLEAQPPLLAGIYRALKNFNLERIRKAFERAKNFDLSKIEKLNKELKAIDD NINIVYERTPTGFVIKRVYKDDTINIKKLIEIGFNLLKNYGIITITVAGMPGASKSLRIDLTSRDAERIDDNYII KAIVESIKMAFKS

GMEWQAEQAYNHLPPLPLDSKLAELAETLPILKACIPARAALAELKQAGELLPNQGLLINLLPLLEAQG SSEIENIVTTTDKLFQYAQEDSQADPMTKEALRYRTALYQCFTQLSNRPLCVTTALEICSTIKSVQMDV RKVPGTSLTNQATGEVIYTPPAGESVIRDLLSNWEAFLHNQDDVDPLIKMAMAHYQFEAIHPFIDGN GRTGRVLNILYLIDQQLLSAPILYLSRYIVAHKQDYYRLLLNVTTQQEWQPWIIFILNAVEQTAKWTTH KIAAARELIAHTTEYVRQQLPKIYSHELVQVIFEQPYCRIQNLVESGLAKRQTASVYLKQLCDIGVLEEV QSGKEKLFVHPKFVTLMTKDSNQFSRYAL

SGLQGMDVVHGTATMQVDGNKTIIRNSVDAIINWKQFNIDQNEMVQFLQENNNSAVFNRVTSNQ ISQLKGILDSNGQVFLINPNGITIGKDAIINTNGFTASTLDISNENIKARNFTFEQTKDKALAEIVNHGLIT VGKDGSVNLIGGKVKNEGVISVNGGSISLLAGQKITISDIINPTITYSIAAPENEAVNLGDIFAKGGNINV RAATIRNQGKLSADSVSKDKSGNIVLSAKEGEAEIGGVISAQNQQAKGGKLMITGDKVTLKTGAVIDL SGKEGGETYLGGDERGEGKNGIQLAKKTSLEKGSTINVSGKEKGGRAIVWGDIALIDGNINAQGSGDI AKTGGFVETSGHDLFIKDNAIVDAKEWLLD

MKNVGFIGWRGMVGSVLMDRMSQENDFENLNPVFFTTSQAGQKAPVFGGKDAGDLKSAFDIEELK KLDIIVTCQGGDYTNEVYPKLKATGWDGYWVDAASALRMKDDAIIVLDPVNQHVISEGLKKGIKTFV GGNCTVSLMLMAIGGLFEKDLVEWISVATYQAASGAGAKNMRELLSQMGLLEQAVSSELKDPASSIL DIERKVTAKMRADNFPTDNFGAALGGSLIPWIDKLLPETGQTKEEWKGYAETNKILGLSDNPIPVDGL CVRIGALRCNSQAFTIKLKKDLPLEEIEQIIASHNEWVKVIPNDKEITLRELTPAKVTGTLSVPVGRLRKLA MGPEYLAAFTVGDQLLWGAAEPVRRILKQLVA

MIKEFSDPLYGFVRVGEAGLRLIDSFPFQRLRYVKQLGLAYLVFPSAQHTRFEHSLGVYHITERICESLKV KEKELVKLAGLLHDLGHPPFSHTTEVLLPRERSHEDFTERVIKETEIYEILKQDYSHEDIERLVRITLGKPED EEEKLLSEIITGEFGSDRMDYLRRDAYFCGVSYGFFDYDRLISTLRVYENKVVVDESGLRALENFLISRYF MYVQVYFHKVVRILSIHLVEFLKKLISQEDFTDINNFLRLNDAFVISELFKRKAFREDFERIFQRKHFKTLL STENYEKFSETKERLLEKFPQEKVRFDEVEKEVYGGNIYVLSSEGLKKAHELSPLIASLKPIKLYRIYVDRQL WEKARSELKLS

MSESPMFAANGMPKVNQGAEEDVRILGYDPLASPALLQVQIPATPTSLETAKRGRREAIDIITGKDDR VLVIVGPCSIHDLEAAQEYALRLKKLSDELKGDLSIIMRAYLEKPRTTVGWKGLINDPDVNNTFNINKGL QSARQLFVNLTNIGLPIGSEMLDTISPQYLADLVSFGAIGARTTESQLHRELASGLSFPVGFKNGTDGTL NVAVDACQAAAHSHHFMGVTKHGVAAITTTKGNEHCFVILRGGKKGTNYDAKSVAEAKAQLPAGS NGLMIDYSHGNSNKDFRNQPKVNDVVCEQIANGENAITGVMIESNINEGNQGIPAEGKAGLKYGVS ITDACIGWETTEDVLRKLAAAVRQRREVNKK

AHCTEYMNAPKKLPADVAEELATTAQKLVQAGKGILAADESTQTIKKRFDNIKLENTIENRASYRDLLF GTKGLGKFISGAILFEETLFQKNEAGVPMVNLLHNENIIPGIKVDKGLVNIPCTDEEKSTQGLDGLAERC KEYYKAGARFAKWRTVLVIDTAKGKPTDLSIHETAWGLARYASICQQNRLVPIVEPEILADGPHSIEVC AVVTQKVLSCVFKALQENGVLLEGALLKPNMVTAGYECTAKTTTQDVGFLTVRTLRRTVPPALPGVVF LSGGQSEEEASVNLNSINALGPHPWALTFSYGRALQASVLNTWQGKKENVAKAREVLLQRAEANSL ATYGKYKGGAGGENAGASLYEKKYVY

AMKPAQKGKTFSNVEIFDPPTNYRDPQVLYARPLELSDGTLLGTWENYSPEPPNVWFPIVKSKDGGK TWKEISKVKDTQNNWGLRYQPQLYELPRAFGKYPKGTVLCSGSSIPSDLSETLIEVYASRDKGYTWEFV SHVALGGEALPNPGLTPVWEPFLMTYKEKLILYYSDQRDNATHSQKLVHQTTTDLKKWSKVVDDTKY ADYYARPGMPTVAKLPNNEYIYVYEYGGGPNPPAGSDYWFPVYYRLSKDPQKFLNKAHHQIVSNDG TTPAGSPYVVWTPYGGKNGTIVVSCGTRSEIFTNQALGDASAWKKWDVPQPTAYTRSLLTFQKDPDL LMIMGAGILPPAGGKNTVSASVVRLSEVMKS

ALFGTKDTTTAHSDYEIILEGGSSSWGQVKGRAKVNVPAAIPLLPTDCNIRIDAKPLDAQKGVVRFTTKI ESVVDSVKNTLNVEVDIANETKDRRIAVGEGSLSVGDFSHSFSFEGSVVNMYYYRSDAVRRNIPNPIY MQGRQFHDILMKVPLDNNDLVDTWEGFQQSISGGGANFGDWIREFWFIGPAFAAINEGGQRISPIV VNSSNVEGGEKGPVGVTRWKFSHAGSGVVDSISRWTELFPVEQLNKPASIEGGFRSDSQGIEVKVDG

NLPGVSRDAGGGLRRILNHPLIPLVHHGMVGKFNDFTVDTQLKIVLPKGYKIRYAAPQFRSQNLEEYR WSGGAYARWVEHVCKGGTGQFEVLYAQ

MSLADISVIQSLPLSGSQAVTGRALNAGARLYFDWLNLNGGINGETIRLVARDDEQKIEQTVRNVRD MARVDNPVALLTVVGTANVEALMREGVLAEARLPLVGPATGASSMTTDPLVFPIKASYQQEIDKMIT ALVTIGVTRIGVLYQEDALGKEAITGVERTLKAHALAITAMASYPRNTANVGPAVDKLLAADVQAIFLG ATAEPAAQFVRQYRARGGEAQLLGLSSIDPGILQKVAGLDAVRGYSLALVMPNPGKSVNPVIREFNR ARAAVGAKDVDLSFRAVEGFVAAKVLAEAIRRAGPKPTREQVRHALTELRDYDVGGGFTVDFTDRSR PGSHYIELGVVGPNGLVIOEGHHHHHH

>DM\_validata221

NAQKRSPTGIVLMNMGGPSKVEETYDFLYQLFADNDLIPISAKYQKTIAKYIAKFRTPKIEKQYREIGGG SPIRKWSEYQATEVCKILDKTCPETAPHKPYVAFRYAKPLTAETYKQMLKDGVKKAVAFSQYPHFSYST TGSSINELWRQIKALDSERSISWSVIDRWPTNEGLIKAFSENITKKLQEFPQPVRDKVVLLFSAHSLPMD VVNTGDAYPAEVAATVYNIMQKLKFKNPYRLVWQSQVGPKPWLGAQTAEIAEFLGPKVDGLMFIPIA FTSDHIETLHEIDLGVIGESEYKDKFKRCESLNGNQTFIEGMADLVKSHLQSNQLYSNQLPLDFALGKS NDPVKDLSLVFGNHEST

>DM\_validata222

KTTISVIKADIGSLAGHHIVHPDTMAAANKVLASAKEQGIILDYYITHVGDDLQLIMTHTRGELDTKVH ETAWNAFKEAAKVAKDLGLYAAGQDLLSDSFSGNVRGLGPGVAEMEIEERASEPIAIFMADKTEPGAY NLPLYKMFADPFNTPGLVIDPTMHGGFKFEVLDVYQGEAVMLSAPQEIYDLLALIGTPARYVIRRVYR NEDNLLAAVVSIERLNLIAGKYVGKDDPVMIVRLQHGLPALGEALEAFAFPHLVPGWMRGSHYGPLM PVSQRDAKATRFDGPPRLLGLGFNVKNGRLVGPTDLFDDPAFDETRRLANIVADYMRRHGPFMPHR LEPTEMEYTTLPLILEKLKDRFKK

>DM validata223

MERTLDRVGVFAATHAAVAASDPLQARALVLQLPGLNRNKDVPGIVGLLREFLPVRGLPSGWGFVEA AAAMRDIGFFLGSLKRHGHEPAEVVPGLEPVLLDLARATNLPPRETLLHVTVWNPTAADAQRSYTGL PDEAHLLESVRISMAALEAAIALTVELFDVSLRSPEFAQRSDELEAYLQKMVESIVYAYRFISPQVFYDEL RPFYEPIRVGGQSYLGPGAVEMPLFVLEHVLWGSQSDDQTYREFKETYLPYVLPAYRAVYARFSGEPA LIDRALDEARAVGTRDEHVRAGLTALERVFKVLLRFRAPHLKLAERAYEVGQSGPEIGSGGYAPSMLGE LLTLTYAARSRVRAALDES

### >DM validata224

GMHLPGGIVENVRKRPGMYCGDVGEYGLHHLVYFLLDVAYEEARRGECRDVVLEVGGDGSIALFCTS RTVTAENLVRVATGAGFLGRPPGDGWGWDSMLVVSLALSSRYQVDIWADGRQWRVMGEHGHPQ GEGAAVTPMEPMPVSAERGVRVHFVPDATIFEVLAFDRARLSRRCNELAALAPGLRVSFADLQRGER TLWHLPGGVAQWAHVLTEARPQLHPEPVVFDFTWDGLRVQCALQWCEDEDSTLLSFANAVRTVR HGAHVKGVTQALRGALAKLSGETRGAFPWARVAQGLTAIVAVSGPRRQMAFAGPTKELLAIPGLEEA IRKOLOPLFIELLREHPVTPALLARRTSGS

### >DM\_validata225

# >DM\_validata227

MASAEVVSKLEAAFAKLQNASDCHSLLKKYLTKEVFDQLKGKQTKMGATLMDVIQSGVENLDSGIGV YAPDAESYTLFAALLDPIIEDYHKGFKPSDKQPPKDSGDLNTFIDVDPDKKYVISTRVRCGRSLEGYPFN PCLKKQQYEEMESRVKGQLESMSGELRGKYYPLTGMTKETQKQLIDDHFLFKEGDRFLQAAHACKF WPTGRGIYHNDAKTFLVWVNEEDHLRIISMQKGGNLKEVFGRLVTAVGVIEEKVKFSRDDRLGFLTFC PTNLGTTIRASVHIKLPKLGADRKKLEEVAAKYNLQVRGTAGEHSDSPDGVYDISNKRRLGLSEYEAVK EMODGILELIKAEESAR

>DM\_validata228

SVLPETPVPFKSGTGAIDNDTVYIGLGSAGTAWYKLDTQAKDKKWTALAAFPGGPRDQATSAFIDGN LYVFGGIGKNSEGLTQVFNDVHKYNPKTNSWVKLMSHAPMGMAGHVTFVHNGKAYVTGGVNQNI FNGYFEDLNEAGKDSTAIDKINAHYFDKKAEDYFFNKFLLSFDPSTQQWSYAGESPWYGTAGAAVVN KGDKTWLINGEAKPGLRTDAVFELDFTGNNLKWNKLAPVSSPDGVAGGFAGISNDSLIFAGGAGFKG SRENYQNGKNYAHEGLKKSYSTDIHLWHNGKWDKSGELSQGRAYGVSLPWNNSLLIIGGETAGGKA VTDSVLITVKDNKVTVONLEHHHHHH

>DM\_validata229

MVAVERVESLAKSGIISIPKEYIRPKEELESINDVFLEEKKEDGPQVPTIDLKNIESDDEKIRENCIEELKKAS LDWGVMHLINHGIPADLMERVKKAGEEFFSLSVEEKEKYANDQATGKIQGYGSKLANNASGQLEWE DYFFHLAYPEEKRDLSIWPKTPSDYIEATSEYAKCLRLLATKVFKALSVGLGLEPDRLEKEVGGLEELLLQ MKINYYPKCPQPELALGVEAHTDVSALTFILHNMVPGLQLFYEGKWVTAKCVPDSIVMHIGDTLEILS NGKYKSILHRGLVNKEKVRISWAVFCEPPKDKIVLKPLPEMVSVESPAKFPPRTFAQHIEHKLFGKEQEE LVSFKND

>DM\_validata230

GPHMSVEQTETAELPASDSINPGNLQLVSELKNPSGSCSVDVSAMFWERAGCKEPCIITACEDVVSL WKALDAWQWEKLYTWHFAEVPVLQIVPVPDVYNLVCVALGNLEIREIRALFCSSDDESEKQVLLKSG NIKAVLGLTKRRLVSSSGTLSDQQVEVMTFAEDGGGKENQFLMPPEETILTFAEVQGMQEALLGTTIM NNIVIWNLKTGQLLKKMHIDDSYQASVCHKAYSEMGLLFIVLSHPCAKESESLRSPVFQLIVINPKTTLS VGVMLYCLPPGQAGRFLEGDVKDHCAAAILTSGTIAIWDLLLGQCTALLPPVSDQHWSFVKWSGTD SHLLAGOKDGNIFVYHYS

>DM\_validata231

MKFGNFLLTYQPPELSQTEVMKRLVNLGKASEGCGFDTVWLLEHHFTEFGLLGNPYVAAAHLLGATE TLNVGTAAIVLPTAHPVRQAEDVNLLDQMSKGRFRFGICRGLYDKDFRVFGTDMDNSRALMDCWY DLMKEGFNEGYIAADNEHIKFPKIQLNPSAYTQGGAPVYVVAESASTTEWAAERGLPMILSWIINTHE KKAQLDLYNEVATEHGYDVTKIDHCLSYITSVDHDSNRAKDICRNFLGHWYDSYVNATKIFDDSDQT KGYDFNKGQWRDFVLKGHKDTNRRIDYSYEINPVGTPEECIAIIQQDIDATGIDNICCGFEANGSEEEII

### **ASMKLFQSDVMPYLKEKQ**

#### >DM validata232

#### >DM validata233

MSKVNEITRESWILSTFPEWGTWLNEEIEQTVVEPNTFSMWWLGCTGIWLKSAGNTNLSIDFWCGTG KKTQKNRLMNTQHQMMRMGGVEALQPNLRTSIFPLDPFAIKEIDAVLASHDHADHIDVNVAAAVL QNCGEHVKFIGPQACVDLWLGWGVPQERCIVAKVGDVLEIGDVKIRVLDSFDRTALVTLPKGVSSYD KAILDGMDERAVNYLIETSGGSVYHSGDSHYSNYYAKHGNDYQIDVALLSYGENPRGVTDKMTSSD VLRAAESLDCQVVVPFHHDIWANFQNDPREIEVLWNMKKDRLQYQFAPFFWQVGGKYTYPTDKGR MHYQHFRGFQDIFKNEPELPYKAFL

# >DM\_validata234

MEAAHFFEGTEKLLEVWFSRQQPDANQGSGDLRTIPRSEWDILLKDVQCSIISVTKTDKQEAYVLSEA SMFVSKRRFILKTCGTTLLLKALVPLLKLARDYSGFDSIQSFFYSRKNFMKPSHQGYPHRNFQEEIEFLN AIFPNGAAYCMGRMNSDCWYLYTLDFPESRVISQPDQTLEILMSELDPAVMDQFYMKDGVTAKDVT RESGIRDLIPGSVIDATMFNPCGYSMNGMKSDGTYWTIHITPEPEFSYVSFETNLSQTSYDDLIRKVVE VFKPGKFVTTLFVNQSSKCRTVLASPQKIEGFKRLDCQSAMFNDYNFVFTSFAKKQQQQQSHICRSQ MVTSQQTSSVVRQT

# >DM validata235

MMESAIGEHLQCPRTLTRRVPDTYTPPFPMWVGRADDALQQVVMGYLGVQFRDEDQRPAALQA MRDIVAGFDLPDGPAHHDLTHHIDNQGYENLIVVGYWKDVSSQHRWSTSTPIASWWESEDRLSDG LGFFREIVAPRAEQFETLYAFQEDLPGVGAVMDGISGEINEHGYWGSMRERFPISQTDWMQASGELR VIAGDPAVGGRVVVRGHDNIALIRSGQDWADAEADERSLYLDEILPTLQSGMDFLRDNGPAVGCYS NRFVRNIDIDGNFLDLSYNIGHWASLDQLERWSESHPTHLRIFTTFFRVAAGLSKLRLYHEVSVFDAAD OLYEYINCHPGTGMLRDAVTIAEH

#### >DM\_validata236

MGSSHHHHHHSSGLVPRGSNLKIKLQKRRDEVNTCLCIGLDPDEADIKSFMQSEKQNGYQSVKKNL SNSGSSSSSNSSSGKGELFAPQMGGQMLLAETPPKEAQEKDEFFYFFNHFCFYIINETKEYALAYKM NFAFYLPYGSLGVDVLKNVFDYLHHLNVPTILDIKMNDIGNTVKHYRKFIFDYLRSDSCTANIYMGTQ MLRDICLDEECKRYYSTFVLVKTTNADSHIFQNRLSLDGKEAYVVIAEEVQKMAKQLHLEENGEFVGF VVGANCYDEIKKIRELFPDCYILAPGVGAQKGDLRKMLCNGYSKNYEKVLINVGRAITKSGSPQQAAR EYHQQIKEVLAELQE

#### >DM validata237

MVDTHKLADDVLQLLDNRIEDNYRVCVILVGSPGSGKSTIAEELCQIINEKYHTFLSEHPNVIEVNDRLK PMVNLVDSLKTLQPNKVAEMIENQGLFKDHVEDVNFQPVKYSALTSNNEECTAVVARGGTANAIRI AAVDNPVNVNKLAQDSINIAQIVPMDGFHLSRRCLDLFKDPQTAHKRRGSPSTFDSNNFLQLCKILA KTSLCKVSSHHKFYSTSSVFEKLSKTFSQTIPDIFVPGFNHALKDPTPDQYCISKFTRIVILEGLYLLYDQE NWKKIYKTLADTGALLVYKIDIDYEATEERVAKRHLQSGLVTTIAEGREKFRSNDLLNGRDIDNHLIKVD NIVHIRND

# >DM\_validata238

GSHMPIQVLPPQLANQIAAGEVVERPASVVKELVENSLDAGATRIDIDIERGGAKLIRIRDNGCGIKKD ELALALARHATSKIASLDDLEAIISLGFRGEALASISSVSRLTLTSRTAEQQEAWQAYAEGRDMNVTVKP AAHPVGTTLEVLDLFYNTPARRKFLRTEKTEFNHIDEIIRRIALARFDVTINLSHNGKIVRQYRAVPEGGQ KERRLGAICGTAFLEQALAIEWQHGDLTLRGWVADPNHTTPALAEIQYCYVNGRMMRDRLINHAIR QACEDKLGADQQPAFVLYLEIDPHQVDVNVHPAKHEVRFHQSRLVHDFIYQGVLSVLQQQLETPLP LDDEPOPAPR

>DM validata239

MIGKRFFQTTSKKIAFAFDIDGVLFRGKKPIAGASDALKLLNRNKIPYILLTNGGGFSERARTEFISSKLDV DVSPLQIIQSHTPYKSLVNKYSRILAVGTPSVRGVAEGYGFQDVVHQTDIVRYNRDIAPFSGLSDEQV MEYSRDIPDLTTKKFDAVLVFNDPHDWAADIQIISDAINSENGMLNTLRNEKSGKPSIPIYFSNQDLLW ANPYKLNRFGQGAFRLLVRRLYLELNGEPLQDYTLGKPTKLTYDFAHHVLIDWEKRLSGKIGQSVKQK LPLLGTKPSTSPFHAVFMVGDNPASDIIGAQNYGWNSCLVKTGVYNEGDDLKECKPTLIVNDVFDAV TKTLEKYA

#### >DM validata240

MRGSHHHHHHGSENLYFQSGAMEIREQLNLGGIVNAQNAQLSNCSDGAAQLESCGTAPDLKGITG WLNTPGNKPIDLKSLRGKVVLIDFWAYSCINCQRAIPHVVGWYQAYKDSGLAVIGVHTPEYAFEKVP GNVAKGAANLGISYPIALDNNYATWTNYRNRYWPAEYLIDATGTVRHIKFGEGDYNVTETLVRQLLN DAKPGVKLPQPSSTTTPDLTPRAALTPETYFGVGKVVNYGGGGAYDEGSAVFDYPPSLAANSFALRG RWALDYQGATSDGNDAAIKLNYHAKDVYIVVGGTGTLTVVRDGKPATLPISGPPTTHQVVAGYRLAS ETLEVRPSKGLQVFSFTYG

## >DM\_validata241

MNGIDDLLNINDRIKQVQNERNELASKLQNLKQSLASNDTGGGSGGGSDSSDLLQREAILANELNIL DNLKTFLNLIKEVKTNLNILELENCYYSLQSLRKKMRNNAAYLKQSFNFQQSISTYVDTLHLELVSTLYKI LTNGFWKITENSIQFTPTVEWGKDKVHIEYDTFMDFVAQQYFPKGSLDNQAWFILDMTSADSQEQV RAKLNTIMKEYMNLSRIVSMIKNSIFISGKEISYENEKNILVFSKSSSHGQHCVSTVLTSFEAVCDFMLDG LAFRDRKTLSYELGPLFNTEFTKFVKNNASIILESLDSPLKNLVSVINNKLTRLVAKSEVTNWTHSGKEIQ DLLMN

# >DM\_validata242

MTTAVARLQPSASGAKTRPVFPFSAIVGQEDMKLALLLTAVDPGIGGVLVFGDRGTGKSTAVRALAAL LPEIEAVEGCPVSSPNVEMIPDWATVLSTNVIRKPTPVVDLPLGVSEDRVVGALDIERAISKGEKAFEPG LLARANRGYLYIDECNLLEDHIVDLLLDVAQSGENVVERDGLSIRHPARFVLVGSGNPEEGDLRPQLLD RFGLSVEVLSPRDVETRVEVIRRRDTYDADPKAFLEEWRPKDMDIRNQILEARERLPKVEAPNTALYDC AALCIALGSDGLRGELTLLRSARALAALEGATAVGRDHLKRVATMALSHRLRRDPLDEAGSTARVART VEETLP

>DM validata243

TPDNNKTVREFNVYWNVPTFMCHKYGLRFEEVSEKYGILQNWMDKFRGEEIAILYDPGMFPALLKDP NGNVVARNGGVPQLGNLTKHLQVFRDHLINQIPDKSFPGVGVIDFESWRPIFRQNWASLQPYKKLS VEVVRREHPFWDDQRVEQEAKRRFEKYGQLFMEETLKAAKRMRPAANWGYYAYPYCYNLTPNQPS AQCEATTMQENDKMSWLFESEDVLLPSVYLRWNLTSGERVGLVGGRVKEALRIARQMTTSRKKVLP YYWYKYQDRRDTDLSRADLEATLRKITDLGADGFIIWGSSDDINTKAKCLQFREYLNNELGPAVKRIAL NNNANDRLTVDVSVDQV

>DM validata245

MKSDYDIPTTENLYFQGSAANAAGPASRYDVTLDQSDAELVEEIAWKLATQATGRPDDAEWVEAAR NAWHAWPATLRRDLAGFRRDSGPDGAIVLRGLPVDSMGLPPTPRVNGSVQREASLGAAVLLMTAC GLGDPGAFLPEKNGALVQDVVPVPGMEEFQGNAGSTLLTFHNENAFHEHRPDFVMLLCLRADPTGR AGLRTACVRRVLPLLSDSTVDALWAPEFRTAPPPSFQLSGPEEAPAPVLLGDRSDPDLRVDLAATEPV TERAAEALRELQAHFDATAVTHRLLPGELAIVDNRVTVHGRTEFTPRYDGTDRWLQRTFVLTDLRRSR AMRPADGYVLGAAPOPA

>DM validata247

ADTGPALKAGHEYMIVTNYPNNLHVVDVASDTVYKSCVMPDKFGPGTAMMAPDNRTAYVLNNHY GDIYGIDLDTCKNTFHANLSSVPGEVGRSMYSFAISPDGKEVYATVNPTQRLNDHYVVKPPRLEVFST ADGLEAKPVRTFPMPRQVYLMRAADDGSLYVAGPDIYKMDVKTGKYTVALPLRNWNRKGYSAPDV LYFWPHQSPRHEFSMLYTIARFKDDKQDPATADLLYGYLSVDLKTGKTHTQEFADLTELYFTGLRSPK DPNQIYGVLNRLAKYDLKQRKLIKAANLDHTYYCVAFDKKGDKLYLGGTFNDLAVFNPDTLEKVKNIK LPGGDMSTTTPOVFIR

>DM validata248

GRSRLLEDFRNNRYPNLQLREIAGHIMEFSQDQHGSRFIQLKLERATPAERQLVFNEILQAAYQLMVDVFGNYVIQKFFEFGSLEQKLALAERIRGHVLSLALQMYGCRVIQKALEFIPSDQQNEMVRELDGHVLK

CVKDQNGNHVVQKCIECVQPQSLQFIIDAFKGQVFALSTHPYGCRVIQRILEHCLPDQTLPILEELHQ HTEQLVQDQYGNYVIQHVLEHGRPEDKSKIVAEIRGNVLVLSQHKFASNVVEKCVTHASRTERAVLID EVCTMNDGPHSALYTMMKDQYANYVVQKMIDVAEPGQRKIVMHKIRPHIATLRKYTYGKHILAKLEK YYMKNGVDLG

#### >DM\_validata249

MIEFDNLTYLHGKPQGTGLLKANPEDFVVVEDLGFEPDGEGEHILVRILKNGCNTRFVADALAKFLKIH AREVSFAGQKDKHAVTEQWLCARVPGKEMPDLSAFQLEGCQVLEYARHKRKLRLGALKGNAFTLVL REVSNRDDVEQRLIDICVKGVPNYFGAQRFGIGGSNLQGAQRWAQTNTPVRDRNKRSFWLSAARS ALFNQIVAERLKKADVNQVVDGDALQLAGRGSWFVATTEELAELQRRVNDKELMITAALPGSGEWG TQREALAFEQAAVAAETELQALLVREKVEAARRAMLLYPQQLSWNWWDDVTVEIRFWLPAGSFATS VVRELINTTGDYAHIAE

#### >DM validata250

MELRHTPARDLDKFIEDHLLPNTCFRTQVKEAIDIVCRFLKERCFQGTADPVRVSKVVKGGSSGKGTTL RGRSDADLVVFLTKLTSFEDQLRRRGEFIQEIRRQLEACQREQKFKVTFEVQSPRRENPRALSFVLSSPQ LQQEVEFDVLPAFDALGQWTPGYKPNPEIYVQLIKECKSRGKEGEFSTCFTELQRDFLRNRPTKLKSLIR LVKHWYQTCKKTHGNKLPPQYALELLTVYAWEQGSRKTDFSTAQGFQTVLELVLKHQKLCIFWEAYY DFTNPVVGRCMLQQLKKPRPVILDPADPTGNVGGGDTHSWQRLAQEARVWLGYPCCKNLDGSLV GAWTMLQKI

# >DM\_validata251

PRRRDPQDDVYLDITDRLCFAILYSRPKSASNVHYFSIDNELEYENFYADFGPLNLAMVYRYCCKINKK LKSITMLRKKIVHFTGSDQRKQANAAFLVGCYMVIYLGRTPEEAYRILIFGETSYIPFRDAAYGSCNFYIT LLDCFHAVKKAMQYGFLNFNSFNLDEYEHYEKAENGDLNWIIPDRFIAFCGPHSRARLESGYHQHSP ETYIQYFKNHNVTTIIRLNKRMYDAKRFTDAGFDHHDLFFADGSTPTDAIVKEFLDICENAEGAIAVHC KAGLGRTGTLIACYIMKHYRMTAAETIAWVRICRPGSVIGPQQQFLVMKQTNLWLEGDYFRQKLKGQ FNGOH

>DM validata253

MGSSGSMNHYTRWLELKEQNPGKYARDIAGLMNIREAELAFARVTHDAWRMHGDIREILAALESVG ETKCICRNEYAVHEQVGTFTNQHLNGHAGLILNPRALDLRLFLNQWASVFHIKENTARGERQSIQFFD HQGDALLKVYATDNTDMAAWSELLARFITDENTPLELKAVDAPVVQTRADATVVEQEWRAMTDVH QFFTLLKRHNLTRQQAFNLVADDLACKVSNSALAQILESAQQDGNEIMVFVGNRGCVQIFTGVVEK VVPMKGWLNIFNPTFTLHLLEESIAEAWVTRKPTSDGYVTSLELFAHDGTQIAQLYGQRTEGEQEQA QWRKQIASLIPEGVAA

#### >DM validata254

YDPIHEYVNHELRKRENEFSEHKNVKIFVASYNLNGCSATTKLENWLFPENTPLADIYVVGFQEIVQLT PQQVISADPAKRREWESCVKRLLNGKCTSGPGYVQLRSGQLVGTALMIFCKESCLPSIKNVEGTVKKT GLGGVSGNKGAVAIRFDYEDTGLCFITSHLAAGYTNYDERDHDYRTIASGLRFRRGRSIFNHDYVVWF GDFNYRISLTYEEVVPCIAQGKLSYLFEYDQLNKQMLTGKVFPFFSELPITFPPTYKFDIGTDIYDTSDKH RVPAWTDRILYRGELVPHSYQSVPLYYSDHRPIYATYEANIVKVDREKKKILFEELYNQRKQEVRDASQ

# >DM validata255

TAPSQVLKIRRPDDWHLHLRDGDMLKTVVPYTSEIYGRAIVMPNLAPPVTTVEAAVAYRQRILDAVPA GHDFTPLMTCYLTDSLDPNELERGFNEGVFTAAKLYPANATANSSHGVTSVDAIMPVLERMEKIGMP LLVHGEVTHADIDIFDREARFIESVMEPLRQRLTALKVVFEHITTKDAADYVRDGNERLAATITPQHLM FNRNHMLVGGVRPHLYCLPILKRNIHQQALRELVASGFNRVFLGTDSAPHARHRKESSCGCAGCFN APTALGSYATVFEEMNALQHFEAFCSVNGPQFYGLPVNDTFIELVREEQQVAESIALTDDTLVPFLAG ETVRWSVKQ

# >DM\_validata256

MSLKMETGKLLMELSNLDGPSGYETNVVSYIKSVIEPFVDEAKTTRHGSLIGYKKGKGIGKLAFFAHVDE IGFVVSKVEGQFARLEPVGGVDPKVVYASKVRIYTKNGIERGVIGMLAPHLQDSESRKKVPTYDEIFVDL SLCERGVRVGDIAVIDQTAFETNGKVVGKALDNRASCGVLVKVLEFLKRYDHPWDVYVVFSVQEETG CLGALTGAYEINPDAAIVMDVTFASEPPFSDHIELGKGPVIGLGPVVDRNLVQKIIEIAKKHNVSLQEEA VGGRSGTETDFVQLVRNGVRTSLISIPLKYMHTPVEMVDPRDVEELARLLSLVAVELEVEGGSHHHHH

#### >DM validata257

APIQAPEISKCVVPPADLPPGAVVDNCCPPVASNIVDYKLPAVTTMKVRPAAHTMDKDAIAKFAKAV ELMKALPADDPRNFYQQALVHCAYCNGGYDQVNFPDQEIQVHNSWLFFPFHRWYLYFYERILGKLI GDPSFGLPFWNWDNPGGMVLPDFLNDSTSSLYDSNRNQSHLPPVVVDLGYNGADTDVTDQQRIT DNLALMYKQMVTNAGTAELFLGKAYRAGDAPSPGAGSIETSPHIPIHRWVGDPRNTNNEDMGNFY SAGRDIAFYCHHSNVDRMWTIWQQLAGKPRKRDYTDSDWLNATFLFYDENGQAVKVRIGDSLDN OKMGYKYAKTPLPWLDSKP

### >DM\_validata258

MKQLSVSLAILCAVATSEAFAADELQQRAQGLFKPVPAKAPTLKGNPASPVKVELGKMLYFDPRLSAS HLISCNTCHNVGLGGGDLQATSTGHGWQKGPRNAPTVLNSVFNTAQFWDGRAKDLAEQAKGPV QAPVEMNNTPDQVVKTLNSIPDYVALFKKAFPGEKDPVTFDNMAKAIEVFEATLITPDSPFDQYLKGK KKALDGKQTAGLKLFLDKGCVACHGGLNLGGTGYFPFGVVEKPAENILPLGDKGRFAVTNTAKDEYV FRAPSLRNVAITYPYFHSGVVWSLKEAVAVMGSAQFGIKLSDDESEAIAAFLGSLTGKQPKVVYPIMPA STDATPRPRL

# >DM validata260

MIRLYPEQLRAQLNEGLRAAYLLLGNDPLLLQESQDAVRQVAAAQGFEEHHTFSIDPNTDWNAIFSL CQAMSLFASRQTLLLLLPENGPNAAINEQLLTLTGLLHDDLLLIVRGNKLSKAQENAAWFTALANRSV QVTCQTPEQAQLPRWVAARAKQLNLELDDAANQVLCYCYEGNLLALAQALERLSLLWPDGKLTLPR VEQAVNDAAHFTPFHWVDALLMGKSKRALHILQQLRLEGSEPVILLRTLQRELLLLVNLKRQSAHTPL RALFDKHRVWQNRRGMMGEALNRLSQTQLRQAVQLLTRTELTLKQDYGQSVWAELEGLSLLLCHK PLADVFIDG

# >DM validata261

MEVSCGQAESSEKPNAEDMTSKDYYFDSYAHFGIHEEMLKDEVRTLTYRNSMFHNRHLFKDKVVLD VGSGTGILCMFAAKAGARKVIGIECSSISDYAVKIVKANKLDHVVTIIKGKVEEVELPVEKVDIIISEWMG

#### >DM validata262

### >DM validata263

# >DM\_validata264

MATFVRNAWYVAALPEELSEKPLGRTILDTPLALYRQPDGVVAALLDICPHRFAPLSDGILVNGHLQC PYHGLEFDGGGQCVHNPHGNGARPASLNVRSFPVVERDALIWIWPGDPALADPGAIPDFGCRVDP AYRTVGGYGHVDCNYKLLVDNLMDLGHAQYVHRANAQTDAFDRLEREVIVGDGEIQALMKIPGGT PSVLMAKFLRGANTPVDAWNDIRWNKVSAMLNFIAVAPEGTPKEQSIHSRGTHILTPETEASCHYFFG SSRNFGIDDPEMDGVLRSWQAQALVKEDKVVVEAIERRRAYVEANGIRPAMLSCDEAAVRVSREIEKL EOLEAAR

### >DM validata265

MPFPFGKSHKSPADIVKNLKESMAVLEKODISDKKAEKATEEVSKNLVAMKEILYGTNEKEPOTEAVA

# >DM\_validata266

MSLINEATLAESIRRLRQGERATLAQAMTLVESRHPRHQALSTQLLDAIMPYCGNTLRLGVTGTPGAG KSTFLEAFGMLLIREGLKVAVIAVDPSSPVTGGSILGDKTRMNDLARAEAAFIRPVPSSGHLGGASQRA RELMLLCEAAGYDVVIVETVGVGQSETEVARMVDCFISLQIAGGGDDLQGIKKGLMEVADLIVINKDD GDNHTNVAIARHMYESALHILRRKYDEWQPRVLTCSALEKRGIDEIWHAIIDFKTALTASGRLQQVRQ QQSVEWLRKQTEEEVLNHLFANEDFDRYYRQTLLAVKNNTLSPRTGLRQLSEFIQTQYFDEGHHHHH H

#### >DM validata268

#### >DM validata270

>DM validata271

MRGSHHHHHHGSGSMHQRQTLYQLMDGLNTFYQQSLQQPVATSARQYLEKRGLSHEVIARFAIGF APPGWDNVLKRFGGNPENRQSLIDAGMLVTNDQGRSYDRFRERVMFPIRDKRGRVIGFGGRVLGN DTPKYLNSPETDIFHKGRQLYGLYEAQQDNAEPNRLLVVEGYMDVVALAQYGINYAVASLGTSTTAD HIQLLFRATNNVICCYDGDRAGRDAAWRALETALPYMTDGRQLRFMFLPDGEDPDTLVRKEGKEAFE ARMEQAMPLSAFLFNSLMPQVDLSTPDGRARLSTLALPLISQVPGETLRIYLRQELGNKLGILDDSQLE RLMPK

### >DM validata272

MNLQRFPRYPLTFGPTPIQPLARLSKHLGGKVHLYAKREDCNSGLAFGGNKTRKLEYLIPEALAQGCD TLVSIGGIQSNQTRQVAAVAAHLGMKCVLVQENWVNYSDAVYDRVGNIQMSRILGADVRLVPDGF DIGFRRSWEDALESVRAAGGKPYAIPAGCSDHPLGGLGFVGFAEEVRAQEAELGFKFDYVVVCSVTGS TQAGMVVGFAADGRADRVIGVDASAKPAQTREQITRIARQTAEKVGLERDIMRADVVLDERFAGPE YGLPNEGTLEAIRLCARTEGMLTDPVYEGKSMHGMIEMVRNGEFPEGSRVLYAHLGGVPALNGYSFIF RDG

## >DM\_validata273

DYFQGAMGSKPAYSFHVTADGQMQPVPFPPDALIGPGIPRHARQINTLNHGEVVCAVTISNPTRHV YTGGKGCVKVWDISHPGNKSPVSQLDCLNRDNYIRSCKLLPDGCTLIVGGEASTLSIWDLAAPTPRIK AELTSSAPACYALAISPDSKVCFSCCSDGNIAVWDLHNQTLVRQFQGHTDGASCIDISNDGTKLWTG GLDNTVRSWDLREGRQLQQHDFTSQIFSLGYCPTGEWLAVGMESSNVEVLHVNKPDKYQLHLHES CVLSLKFAYCGKWFVSTGKDNLLNAWRTPYGASIFQSKESSSVLSCDISVDDKYIVTGSGDKKATVYEV IY

### >DM\_validata274

VASGYGGIRVGGPYFDDLSKGQVFDWAPGVTLSLGLAAAHQSIVGNRLRLALDSDLCAAVTGMPGP LAHPGLVCDVAIGQSTLATQRVKANLFYRGLRFHRFPAVGDTLYTRTEVVGLRANSPKPGRAPTGLA GLRMTTIDRTDRLVLDFYRCAMLPASPDWKPGAVPGDDLSRIGADAPAPAADPTAHWDGAVFRKR VPGPHFDAGIAGAVLHSTADLVSGAPELARLTLNIAATHHDWRVSGRRLVYGGHTIGLALAQATRLLP NLATVLDWESCDHTAPVHEGDTLYSELHIESAQAHADGGVLGLRSLVYAVSDSASEPDRQVLDWRF SALQF

>DM\_validata275

#### >DM\_validata276

# >DM\_validata277

# >DM validata280

>DM\_validata282

## >DM\_validata283

# >DM validata284

# >DM validata285

>DM\_validata287

GPLGSMTTKQTVSLFIWLPESKQKTLFISTKNHTQFELNNIIFDVTLSTELPDKEPNAIITKRTHPVGKMA DEMRKYEKDHPKVLFLESSAIHDMMSSREEINALLIKNNIPIPNSFSVKSKEEVIQLLQSKQLILPFIVKPE NAQGTFNAHQMKIVLEQEGIDDIHFPCLCQHYINHNNKIVKVFCIGNTLKWQTRTSLPNVHRCGIKS VDFNNQHLEDILSWPEGVIDKQDIIENSANRFGSKILEDPILLNLTSEAEMRDLAYKVRCALGVQLCGI DFIKENEOGNPLVVDVNVFPSYGGKVDFDWFVEKVALCYTEVAKI

>DM\_validata289

MNTQKPFENHLKSVDDLKTTYEEYRAGFIAFALEKNKRSTPYIERARALKVAASVAKTPKDLLYLEDIQD ALLYASGISDKAKKFLTEDDKKESINNLIENFLEPAGEEFIDELIFRYLLFQGDSLGGTMRNIAGALAQQK LTRAIISALDIANIPYKWLDSRDKKYTNWMDKPEDDYELETFAKGISWTINGKHRTLMYNITVSLVKKN VDICLFNCEPEIYTPQKVHQQPEKYLLLGELKGGIDPAGADEHWKTANTALTRIRNKFSEKGLSPKTIFI GAAIEHSMAEEIWDQLQSGSLTNSANLTKTEQVGSLCRWIINI

>DM\_validata292

HGDNNSKPKPGGNSGNRGNNGDGASAKVGEITITPDNSKPGRYISSNPEYSLLAKLIDAESIKGTEVYT FHTRKGQYVKVTVPDSNIDKMRVDYVNWKGPKYNNKLVKRFVSQFLLFRKEEKEKNEKEALLKASELV SGMGDKLGEYLGVKYKNVAKEVANDIKNFHGRNIRSYNEAMASLNKVLANPKMKVNKSDKDAIVN AWKQVNAKDMANKIGNLGKAFKVADLAIKVEKIREKSIEGYNTGNWGPLLLEVESWIIGGVVAGVAIS LFGAVLSFLPISGLAVTALGVIGIMTISYLSSFIDANRVSNINNIISSVIR

>DM validata293

>DM\_validata295

>DM\_validata299

GSHMTALDWRSALTADEQRSVRALVTATTAVDGVAPVGEQVLRELGQQRTEHLLVAGSRPGGPIIG YLNLSPPRGAGGAMAELVVHPQSRRRGIGTAMARAALAKTAGRNQFWAHGTLDPARATASALGLV GVRELIQMRRPLRDIPEPTIPDGVVIRTYAGTSDDAELLRVNNAAFAGHPEQGGWTAVQLAERRGEA WFDPDGLILAFGDSPRERPGRLLGFHWTKVHPDHPGLGEVYVLGVDPAAQRRGLGQMLTSIGIVSLA RRLGGRKTLDPAVEPAVLLYVESDNVAAVRTYQSLGFTTYSVDTAYALAGTDN

>DM\_validata300

MTELPLQFAEPDDDLERVRATLYSLDPDGDRTAGVLRDTLDQLYDGQRTGRWNFDQLHKTEKTHM GTLVEINLHREFQFGDGFETDYEIAGVQVDCKFSMSQGAWMLPPESIGHICLVIWASDQQCAWTAG LVKVIPQFLGTANRDLKRRLTPEGRAQVVKLWPDHGKLQENLLLHIPGDVRDQIFSAKSSRGNQHGQ ARVNELFRRVHGRLIGRAVIATVAQQDDFMKRVRGSGGARSILRPEGIIILGHQDNDPKVANDLGLPV PRKGQVVAARVVPADEGDQRQTAEIQGRRWAVAVPGDPIVEAPVVPRKSAE

>DM validata301

EVVLVNVTENFNMWKNDMVEQMHEDIISLWDQSLKPCVKLTPLCVGAGSCNTSVITQACPKVSFEPI PIHYCAPAGFAILKCNNKTFNGTGPCTNVSTVQCTHGIRPVVSTQLLLNGSLAEEEVVIRSVNFTDNAK TIIVQLNTSVEINCTGAGHCNIARAKWNNTLKQIASKLREQFGNNKTIIFKQSSGGDPEIVTHSFNCGG EFFYCNSTQLFNSTWFNSTWSTEGSNNTEGSDTITLPCRIKQIINMWQKVGKAMYAPPISGQIRCSSN ITGLLLTRDGGNSNNESEIFRPGGGDMRDNWRSELYKYKVVKIE

>DM\_validata303

AAIVAGPKQNCEPDLMPYARPFAVGKRTCSGIVGLPSGSDPAFSQPKSVLDAGLTCQGASPSSVSKPI LLVPGTGTTGPQSFDSNWIPLSAQLGYTPCWISPPPFMLNDTQVNTEYMVNAITTLYAGSGNNKLPV LTWSQGGLVAQWGLTFFPSIRSKVDRLMAFAPDYKGTVLAGPLDALAVSAPSVWQQTTGSALTTAL RNAGGLTQIVPTTNLYSATDEIVQPQVSNSPLDSSYLFNGKNVQAQAVCGPLFVIDHAGSLTSQFSYV VGRSALRSTTGOARSADYGITDCNPLPANDLTPEOKVAAAALLAPAA

>DM\_validata304

VNYAAGLSPYADKGKCGLPEIFDPPEELERKVWELARLVWQSSSVVFHTGAGISTASGIPDFRGPHGV WTMEERGLAPKFDTTFESARPTQTHMALVQLERVGLLRFLVSQNVDGLHVRSGFPRDKLAELHGNM FVEECAKCKTQYVRDTVVGTMGLKATGRLCTVAKARGLRACRGELRDTILDWEDSLPDRDLALADEA SRNADLSITLGTSLQIRPSGNLPLATKRRGGRLVIVNLQPTKHDRHADLRIHGYVDEVMTRLMKHLGL EIPAWDGPRVLERALPPLPRPPTPKLEPKEESPTRINGSIPAGPKQE

>DM\_validata305

ANMPPGSVEQVAAKVVPSVVMLETDLGRQSEEGSGIILSAEGLILTNNHVIAAAAKPPLGSPPPKTTVT FSDGRTAPFTVVGADPTSDIAVVRVQGVSGLTPISLGSSSDLRVGQPVLAIGSPLGLEGTVTTGIVSALN RPVSTTGEAGNQNTVLDAIQTDAAINPGNSGGALVNMNAQLVGVNSAIATLGADSADAQSGSIGL GFAIPVDQAKRIADELISTGKASHASLGVQVTNDKDTLGAKIVEVVAGGAAANAGVPKGVVVTKVDD RPINSADALVAAVRSKAPGATVALTFQDPSGGSRTVQVTLGKAEQ

>DM validata306

RDFSPVPWSQYFESMEDVEVENETGKDTFRVYKSGSEGPVLLLLHGGGHSALSWAVFTAAIISRVQCR IVALDLRSHGETKVKNPEDLSAETMAKDVGNVVEAMYGDLPPPIMLIGHSMGGAIAVHTASSNLVPS LLGLCMIDVVEGTAMDALNSMQNFLRGRPKTFKSLENAIEWSVKSGQIRNLESARVSMVGQVKQCE GITSPEGSKKDHPYTWRIELAKTEKYWDGWFRGLSNLFLSCPIPKLLLLAGVDRLDKDLTIGQMQGKFQMQVLPQCGHAVHEDAPDKVAEAVATFLIRHRFAEPIGGFQCVFPGC

>DM\_validata308

DQLIPVINKLQDVFNTLGSDPLDLPQIVVVGSQSSGKSSVLENIVGRDFLPRGSGIVTRRPLILQLTHLPI ADDGSQTQEWGEFLHKPNDMFYDFSEIREEIIRDTDRMTGKNKGISAQPINLKIYSPHVVNLTLVDLP GITKVPVGDQPTDIEQQIRRMVMAYIKKQNAIIVAVTPANTDLANSDALQLAKEVDPEGKRTIGVITKL DLMDKGTDAMEVLTGRVIPLTLGFIGVINRSQEDIIAKKSIRESLKSEILYFKNHPIYKSIANRSGTAYLSKT LNKLLMFHIRDTLPDLKVKVSKMLSDVOGELSTY

>DM\_validata309

MEVKTIKVFTTVDNTNLHTQLVDMSMTYGQQFGPTYLDGADVTKIKPHVNHEGKTFFVLPSDDTLRS EAFEYYHTLDESFLGRYMSALNHTKKWKFPQVGGLTSIKWADNNCYLSSVLLALQQLEVKFNAPALQ EAYYRARAGDAANFCALILAYSNKTVGELGDVRETMTHLLQHANLESAKRVLNVVCKHCGQKTTTLT GVEAVMYMGTLSYDNLKTGVSIPCVCGRDATQYLVQQESSFVMMSAPPAEYKLQQGTFLCANEYT GNYQCGHYTHITAKETLYRIDGAHLTKMSEYKGPVTDVFYKETSYTTTI

>DM validata311

GMAGAIASRMSFSSLKRKQPKTFTVRIVTMDAEMEFNCEMKWKGKDLFDLVCRTLGLRETWFFGLQ YTIKDTVAWLKMDKKVLDHDVSKEEPVTFHFLAKFYPENAEEELVQEITQHLFFLQVKKQILDEKIYCPP EASVLLASYAVQAKYGDYDPSVHKRGFLAQEELLPKRVINLYQMTPEMWEERITAWYAEHRGRARDE AEMEYLKIAQDLEMYGVNYFAIRNKKGTELLLGVDALGLHIYDPENRLTPKISFPWNEIRNISYSDKEFTI KPLDKKIDVFKFNSSKLRVNKLILQLCIGNHDLFMRRRKA

>DM validata312

MRKPILAALTLAGLGLAQEFITIGSGSTTGVYFPVATGIAKLVNDANVGIRANARSTGGSVANINAINA GEFEMALAQNDIAYYAYQGCCIPAFEGKPVKTIRALAALYPEVVHVVARKDAGIRTVADLKGKRVVVG DVGSGTEQNARQILEAYGLTFDDLGQAIRVSASQGIQLMQDKRADALFYTVGLGASAIQQLALTTPIA LVAVDLNRIQAIAKKYPFYVGFNIPGGTYKGVDVTTPTVAVQAMLIASERLSEETVYKFMKAVFGNLEA FKKIHPNLERFFGLEKAVKGLPIPLHPGAERFYKEAGVLK

>DM\_validata313

PTITPNKLTLKIGRAEGRPGDTVEIPVNLYGVPQKGIASGDFVVSYDPNVLEIIEIEPGELIVDPNPTKSFD TAVYPDRKMIVFLFAEDSGTGAYAITEDGVFATIVAKVKEGAPEGFSAIEISEFGAFADNDLVEVETDLIN GGVLVTNKPVIEGYKVSGYILPDFSFDATVAPLVKAGFKVEIVGTELYAVTDANGYFEITGVPANASGYT LKISRATYLDRVIANVVVTGDTSVSTSQAPIMMWVGDIVKDNSINLLDVAEVIRCFNATKGSANYVEE LDINRNGAINMODIMIVHKHFGATSSDYDAO

>DM\_validata314

MVPAESNAVQAKLAKTLQRFENKIKAGDYYEAHQTLRTIANRYVRSKSYEHAIELISQGALSFLKAKQG GSGTDLIFYLLEVYDLAEVKVDDISVARLVRLIAELDPSEPNLKDVITGMNNWSIKFSEYKFGDPYLHNTI GSKLLEGDFVYEAERYFMLGTHDSMIKYVDLLWDWLCQVDDIEDSTVAEFFSRLVFNYLFISNISFAHE SKDIFLERFIEKFHPKYEKIDKNGYEIVFFEDYSDLNFLQLLLITCQTKDKSYFLNLKNHYLDFSQAYKSELE FLGQEYFNIVAPKQTNFLQDMMSGFLGGSK

>DM validata315

TSCVAEEPIKKIAIFGGTHGNELTGVFLVTHWLKNGAEVHRAGLEVKPFITNPRAVEKCTRYIDCDLNR VFDLENLSKEMSEDLPYEVRRAQEINHLFGPKNSDDAYDVVFDLHNTTSNMGCTLILGDSGNDFLIQ MFHYIKTCMAPLPCSVYLIEHPSLKYATTRSIAKYPVGIEVGPQPHGVLRADILDQMRRMLKHALDFIQ RFNEGKEFPPCAIDVYKIMEKVDYPRNESGDVAAVIHPNLQDQDWKPLHPGDPVFVSLDGKVIPLGG DCTVYPVFVNEAAYYEKKEAFAKTTKLTLNAKSIRSTLH

>DM validata316

MGSKNESTASKASGTASEKKKIEYLDKTYEVTVPTDKIAITGSVESMEDAKLLDVHPQGAISFSGKFPD MFKDITDKAEPTGEKMEPNIEKILEMKPDVILASTKFPEKTLQKISTAGTTIPVSHISSNWKENMMLLAQ LTGKEKKAKKIIADYEQDLKETKTKINDKAKDSKALVIRIRQGNIYIYPEQVYFNSTLYGDLGLKAPNEVK AAKAQELISLEKLSEMNPDHIFVQFSDDENADKPDALKDLEKNPIWKSLKAVKEDHVYVNSVDPLAQ GGTAWSKVRFLKAAAEKLTQNKLAAALEHHHHHH

>DM\_validata317

MARKRSNTYRSINEIQRQKRNRWFIHYLNYLQSLAYQLFEWENLPPTINPSFLEKSIHQFGYVGFYKDP VISYIACNGALSGQRDVYNQATVFRAASPVYQKEFKLYNYRDMKEEDMGVVIYNNDMAFPTTPTLEL FAAELAELKEIISVNQNAQKTPVLIRANDNNQLSLKQVYNQYEGNAPVIFAHEALDSDSIEVFKTDAPY VVDKLNAQKNAVWNEMMTFLGIKNANLEKKERMVTDEVSSNDEQIESSGTVFLKSREEACEKINELY GLNVKVKFRYDIVEQMRRELQQIENVSRGTSDGETNE

#### >DM\_validata318

MDWGRFVEEKVREIRETVGDSKAIIALSGGVDSSTAAVLAHKAIGDRLHAVFVNTGFLRKGEPEFVVKT FRDEFGMNLHYVDAQDRFFSALKGVTDPEEKRKIIGRVFIEVFEEVAKKIGAEYLIQGTIAPDWIESQGKI KSHHNVGGLPEKLNLKLIEPLRDLYKDEVRELAKFLGLPEKIYNRMPFPGPGLAVRVIGEVTPEKIRIVRE ANAIVEEEVERAGLRPWQAFAVLLGVKTVGVQGDIRAYKETIAVRIVESIDGMTANAMNVPWEVLQR IAFRITSEIPEVGRVLYDITNKPPATIEFE

# >DM validata319

MSEAADVERVYAAMEEAAGLLGVACARDKIYPLLSTFQDTLVEGGSVVVFSMASGRHSTELDFSISVP TSHGDPYATVVEKGLFPATGHPVDDLLADTQKHLPVSMFAIDGEVTGGFKKTYAFFPTDNMPGVAEL SAIPSMPPAVAENAELFARYGLDKVQMTSMDYKKRQVNLYFSELSAQTLEAESVLALVRELGLHVPNE LGLKFCKRSFSVYPTLNWETGKIDRLCFAVISNDPTLVPSSDEGDIEKFHNYATKAPYAYVGEKRTLVYG LTLSPKEEYYKLGAYYHITDVQRGLLKAFDSLED

# >DM validata320

GTDDEEKDNNGQGSVSVETNYLPIADPYVMFYNNKYYAYGTGGTTAGEGFACFSSDDLKNWKREG QALSATDSYGTWGFWAPEVYYVESKKKFYLFYSAEEHICVATSTTPEGPFRQEVKQPIWSEKSIDTSLFI DDDGTPYLYFVRFTDGNVIWVAQMTDDLMSIKTETLNQCIKAEVSWELLQGKVAEGPSLLKKNGVYY LIYSANHYENKGYGVGYATSDTPMGPWVKYSKNPLLQGDAATGLVGTGHGAPFQCKDGSWKYIFH AHWSAAEIQPRTSYIKDFAISDQGVVTISGTVIKPRVLK

>DM\_validata321

EVSTTQNDTLKVMTHNVYMLSTNLYPNWGQTERADLIGAADYIKNQDVVILNEVFDNSASDRLLGN LKKEYPNQTAVLGRSSGSEWDKTLGNYSSSTPEDGGVAIVSKWPIAEKIQYVFAKGCGPDNLSNKGFV YTKIKKNDRFVHVIGTHLQAEDSMCGKTSPASVRTNQLKEIQDFIKNKNIPNNEYVLIGGDMNVNKIN AENNNDSEYASMFKTLNASVPSYTGHTATWDATTNSIAKYNFPDSPAEYLDYIIASKDHANPSYIENK VLOPKSPOWTVTSWFOKYTYNDYSDHYPVEATISMK

#### >DM\_validata323

MDSHCRVRPAGPAVPADCDPPRITHAALAARLGDARLLTLYDQATWSEGPAWWEAQRTLVWSDL VGRRVLGWREDGTVDVLLDATAFTNGNAVDAQQRLVHCEHGRRAITRSDADGQAHLLVGRYAGK RLNSPNDLIVARDGAIWFTDPPFGLRKPSQGCPADPELAHHSVYRLPPDGSPLQRMADLDHPNGLA FSPDEQTLYVSQTPEQGHGSVEITAFAWRDGALHDRRHFASVPDGLPDGFCVDRGGWLWSSSGTG VCVFDSDGQLLGHIPTPGTASNCTFDQAQQRLFITGGPCLWMLPLP

# >DM validata324

MIPFKDITLADRDTITAFTMKSDRRNCDLSFSNLCSWRFLYDTQFAVIDDFLVFKFWAGEQLAYMMP VGNGDLKAVLRKLIEDADKEKHNFCMLGVCSNMRADLEAILPERFIFTEDRAYADYIYLRSDLATLKGK KFQAKRNHINRFRNTYPDYEYTPITPDRIQECLDLEAEWCKVNNCDQQEGTGNERRALIYALHNFEAL GLTGGILHVNGKIVAFTFGMPINHETFGVHVEKADTSIDGAYAMINYEFANRIPEQYIYINREEDLGIEG LRKAKLSYOPVTILEKYMACLKDHPMDMVRW

# >DM validata326

HSGRPVLGSSHHHHHHSSGMMLRVAVPNKGALSEPATEILAEAGYRRRTDSKDLTVIDPVNNVEFFF LRPKDIAIYVGSGELDFGITGRDLVCDSGAQVRERLALGFGSSSFRYAAPAGRNWTTADLAGMRIATA YPNLVRKDLATKGIEATVIRLDGAVEISVQLGVADAIADVVGSGRTLSQHDLVAFGEPLCDSEAVLIER AGTDGQDQTEARDQLVARVQGVVFGQQYLMLDYDCPRSALKKATAITPGLESPTIAPLADPDWVAI RALVPRRDVNGIMDELAAIGAKAILASDIRFCRF

>DM\_validata327

GALGVVDEVHAGKEIGLQIYSLSQELYKGDVAANLRKVKDMGYSKLELAGYGKGAIGGVPMMDFKK MAEDAGLKIISSHVNPVDTSISDPFKAMIFKYSKEVTPKIMEYWKATAADHAKLGCKYLIQPMMPTITT HDEAKLVCDIFNQASDVIKAEGIATGFGYHNHNMEFNRVATKEQQEKVKGNPFAAFMKVGDQIYDL MLKDTDPSKVYFEMDVYWTVMGQNDPVEYMQKHPDRIKVLHIKDRAVFGQSGMMNFEMIFKQM YANGIKDYFVELEOMPDGRTOFAGVKDCADYLIKAPFVK

#### >DM\_validata328

MSETPRLLFVHAHPDDESLSNGATIAHYTSRGAQVHVVTCTLGEEGEVIGDRWAQLTADHADQLGG YRIGELTAALRALGVSAPIYLGGAGRWRDSGMAGTDQRSQRRFVDADPRQTVGALVAIIRELRPHVV VTYDPNGGYGHPDHVHTHTVTTAAVAAAGVGSGTADHPGDPWTVPKFYWTVLGLSALISGARALV PDDLRPEWVLPRADEIAFGYSDDGIDAVVEADEQARAAKVAALAAHATQVVVGPTGRAAALSNNLA LPILADEHYVLAGGSAGARDERGWETDLLAGLGFTASGT

# >DM\_validata329

SSSSTAAASAKKILVKHVTVIGGGLMGAGIAQVAAATGHTVVLVDQTEDILAKSKKGIEESLRKVAKKK FAENPKAGDEFVEKTLSSISTSTDAASVVHSTDLVVEAIVENLKVKSELFKRLDKFAAEHTIFASNTSSLQI TSLANATTRQDRFAGLHFFNPVPLMKLVEVVKTPMTSQKTLESLVDFSKTLGKHPVSCKDTPGFIVNR LLVPYLIEAVRLYERGDASKEDIDTAMKLGAGYPMGPFELLDYVGLDTTKFIIDGWHEMDSQNPLFQP SPAMNKLVAENKFGKKTGEGFYKYK

### >DM validata330

MARVTTGITSSHIPALGAAIQTGTSDNDYWGPVFKGYQPIRDWIKQPGNMPDVVILVYNDHASAFD MNIIPTFAIGCAETFKPADEGWGPRPVPDVKGHPDLAWHIAQSLILDEFDMTIMNQMDVDHGCTVP LSMIFGEPEEWPCKVIPFPVNVVTYPPPSGKRCFALGDSIRAAVESFPEDLNVHVWGTGGMSHQLQG PRAGLINKEFDLNFIDKLISDPEELSKMPHIQYLRESGSEGVELVMWLIMRGALPEKVRDLYTFYHIPAS NTALGAMILOPEETAGTPLEPRKVMSGHSLAQA

## >DM\_validata331

MTTYTFDQVEEAIEQLYPDFTINTIEISGEGNDCIAYEINGNFIFKFPKHSRASINLLNEVTVLKTIHNELSL PIPEVVFTGMPSEMCQMSFAGFTKIKGVPLTPLLLKNLPKQSQDQAAKDLARFLSELHSINISGFKSNL VLDFREKINEDNKKIKKLLSRELKGHQMKKVDDFYRDILDNEIYFKYYPCLIHNDFSSDHILFDTEKNTIC GIIDFGDAAISDPDNDFISLMEDDEEYGMEFVSKILNHYKHKDIPTVLEKYMMKEKYWSFEKIIYGKEYG YMDWYEEGLNEISSIKIK

#### >DM\_validata332

MSNAALATAPHALELDVHPVAGRIGAEIRGVKLSPDLDAATVEAIQAALVRHKVIFFRGQTHLDDQS QEGFAKLLGEPVAHPTVPVVDGTRYLLQLDGAQGQRANSWHTDVTFVEAYPKASILRSVVAPASGG DTVWANTAAAYQELPEPLRELADKLWAVHSNEYDYASLKPDIDPAKLERHRKVFTSTVYETEHPVVR VHPISGERALQLGHFVKRIKGYSLADSQHLFAVLQGHVTRLENTVRWRWEAGDVAIWDNRATQHY AVDDYGTQPRIVRRVTLAGEVPVGVDGQLSRTTRKG

# >DM\_validata333

MGSASEQRVTLTNADKVLYPATGTTKSDIFDYYAGVAEVMLGHIAGRPATRKRWPNGVDQPAFFEK QLALSAPPWLSRATVAHRSGTTTYPIIDSATGLAWIAQQAALEVHVPQWRFVAEPGSGELNPGPATR LVFDLDPGEGVMMAQLAEVARAVRDLLADIGLVTFPVTSGSKGLHLYTPLDEPVSSRGATVLAKRVA QRLEQAMPALVTSTMTKSLRAGKVFVDWSQNSGSKTTIAPYSLRGRTHPTVAAPRTWAELDDPALR OLSYDEVLTRIARDGDLLERLDADAPVADRLTRY

DISSTEIAVYWGQREDGLLRDTCKTNNYKIVFISFLDKFGCEIRKPELELEGVCGPSVGNPCSFLESQIKE CQRMGVKVFLALGGPKGTYSACSADYAKDLAEYLHTYFLSERREGPLGKVALDGIHFDIQKPVDELN WDNLLEELYQIKDVYQSTFLLSAAPGCLSPDEYLDNAIQTRHFDYIFVRFYNDRSCQYSTGNIQRIRNA WLSWTKSVYPRDKNLFLELPASQATAPGGGYIPPSALIGQVLPYLPDLQTRYAGIALWNRQADKETGY STNIIRYLNATAMPFTSNLLKYPS

MTMAGQTINDRLLAARHSLAGQGLAKSVCKATTEECIGPKKKHLDYLVHCANEPNVSIPHLANLLIER SQNANWVVVYKSLITTHHLMAYGNERFMQYLASSNSTFNLSSFLDKGTVQDGGMGVPGGRMGYD MSPFIRRYAKYLNEKSLSYRAMAFDFCKVKRGKEEGSLRSMNAEKLLKTLPVLQAQLDALLEFDCQSN DLSNGVINMSFMLLFRDLIRLFACYNDGIINLLEKYFDMNKKHARDALDLYKKFLVRMDRVGEFLKVA ENVGIDKGDIPDLTKAPSSLLDALEOHLATL

MSLVPATNYIYTPLNQLKGGTIVNVYGVVKFFKPPYLSKGTDYCSVVTIVDQTNVKLTCLLFSGNYEAL PIIYKNGDIVRFHRLKIQVYKKETQGITSSGFASLTFEGTLGAPIIPRTSSKYFNFTTEDHKMVEALRVWAS THMSPSWTLLKLCDVQPMQYFDLTCQLLGKAEVDGASFLLKVWDGTRTPFPSWRVLIQDLVLEGDL SHIHRLQNLTIDILVYDNHVHVARSLKVGSFLRIYSLHTKLQSMNSENQTMLSLEFHLHGGTSYGRGIR VLPESNSDVDQLKKDLESANLTA

MMAIATKRRGVAAVMSLGVATMTAVPALAQDVLGDLPVIGKPVNGGMNFQPASSPLAHDQQWL DHFVLYIITAVTIFVCLLLLICIVRFNRRANPVPARFTHNTPIEVIWTLVPVLILVAIGAFSLPILFRSQEMPN DPDLVIKAIGHQWYWSYEYPNDGVAFDALMLEKEALADAGYSEDEYLLATDNPVVVPVGKKVLVQV TATDVIHAWTIPAFAVKQDAVPGRIAQLWFSVDQEGVYFGQCSELCGINHAYMPIVVKAVSQEKYEA WLAGAKEEFAADASDYLPASPVKLASAE

MPVDKNLRDLEPGIHTDLEGRLTYGGYLRLDQLLSAQQPLSEPAHHDEMLFIIQHQTSELWLKLLAHE LRAAIVHLQRDEVWQCRKVLARSKQVLRQLTEQWSVLETLTPSEYMGFRDVLGPSSGFQSLQYRYIEF LLGNKNPQMLQVFAYDPAGQARLREVLEAPSLYEEFLRYLARFGHAIPQQYQARDWTAAHVADDTL RPVFERIYENTDRYWREYSLCEDLVDVETQFQLWRFRHMRTVMRVIGFKRGTGGSSGVGFLQQALAL TFFPELFDVRTSVGVDNRPPOGSADAGKR

GMRESYANENQFGFKTINSDIHKIVIVGGYGKLGGLFARYLRASGYPISILDREDWAVAESILANADVVI VSVPINLTLETIERLKPYLTENMLLADLTSVKREPLAKMLEVHTGAVLGLHPMFGADIASMAKQVVVRC DGRFPERYEWLLEQIQIWGAKIYQTNATEHDHNMTYIQALRHFSTFANGLHLSKQPINLANLLALSSPI YRLELAMIGRLFAQDAELYADIIMDKSENLAVIETLKQTYDEALTFFENNDRQGFIDAFHKVRDWFGD YSEQFLKESRQLLQQANDLKQG

MASDKFPVAENPSSSFKYESAVQYRPAPDSYLNPCPQAGRIVKETYTGINGTKSLNVYLPYGYDPNKK YNIFYLMHGGGENENTIFSNDVKLQNILDHAIMNGELEPLIVVTPTFNGGNCTAQNFYQEFRQNVIPF VESKYSTYAESTTPQGIAASRMHRGFGGFAMGGLTTWYVMVNCLDYVAYFMPLSGDYWYGNSPQ DKANSIAEAINRSGLSKREYFVFAATGSEDIAYANMNPQIEAMKALPHFDYTSDFSKGNFYFLVAPGA THWWGYVRHYIYDALPYFFHELEHHHHHH

STETLSFTPDNINADISLGTLSGKTKERVYLAEEGGRKVSQLDWKFNNAAIIKGAINWDLMPQISIGAA GWTTLGSRGGNMVDQDWMDSSNPGTWTDEARHPDTQLNYANEFDLNIKGWLLNEPNYRLGLM AGYQESRYSFTARGGSYIYSSEEGFRDDIGSFPNGERAIGYKQRFKMPYIGLTGSYRYEDFELGGTFKYS GWVESSDNDEHYDPKGRITYRSKVKDQNYYSVAVNAGYYVTPNAKVYVEGAWNRVTNKKGNTSLY DHNNNTSDYSKNGAGIENYNFITTAGLKYTF

KTTYNRWWKKKVWFGRKDMSYKVIVDSCGEFTPEMKADGGFEHVALGIQIEDTQWTDDDSLKQEE LLLKIAESTSCAKTSCPSPERYMESYHCDAERIYVVTLSAELSGSYNSAVLGKNLYEEEYGEKQIHVFNSR SASVGETLIALKVQQCEKAGMTFEEVVESVECYIEEQHTYFVLENLDTLRKNGRLTGIKSLVAGALNIKPI MGSTPQGTICQKEKARGMKKALVKMADCVAADVVNAGDKILAIAHCNCEERAKEVQRLLKERFAVK SSFIVDTSGISTVYANDGGIIVVV

MGSDKIHHHHHHVIIESRIEKGKPVVGMETTVFVHGLPRKEAIELFRRAKEISREKGFQLAVIGILKGKIV AGMSEELEAMMREGADKVGTREIPIVVAEGKNAATTVSATIFLSRRIGIEVVVTGGTGGVHPGRVDV SQDLTEMSSSRAVLVSSGIKSILDVEATFEMLETLEIPLVGFRTNEFPLFFSRKSGRRVPRIENVEEVLKIYE SMKEMELEKTLMVLNPVPEEYEIPHDEIERLLEKIELEVEGKEVTPFLLKKLVEMTNGRTLKANLALLEEN VKLAGEIAVKLKRS

GAHMNDIKQLLWNGELNVLVSIDPSFLMKGSPREIAVLRIRVPRETYLVNYMPLIWNKIKSFLSFDPLT DSEKYFWFEHNKTPIPWNYPVGVLFDCLAGKSATFTTSFENQVKDVLTFLRIHLVMGDSLPPTIIPIASS KTQAEKFWFHQWKQVCFILNGSSKAIMSLSVNEARKFWGSVITRNFQDFIEISNKISSSRPRHIPLIIQTS RTSGTFRISQPTISMTGVNPTLKDIEGDILDVKEGINGNDVMVICQGIEIPWHMLLYDLYSKLRSFDGFL YITLVPIKGGDKASSEL

MGSDKIHHHHHHMTNANGNLKKCPITISSYTLGTEVSFPKRVKVAAENGFDGIGLRAENYVDALAAG LTDEDMLRILDEHNMKVTEVEYITQWGTAEDRTAEQQKKEQTTFHMARLFGVKHINCGLLEKIPEEQII VALGELCDRAEELIIGLEFMPYSGVADLQAAWRVAEACGRDNAQLICDTWHWARANQTAESIKNVP ADRIVSIQLCDVHETPYKELREESLHDRLAPGEGYGDTVGFAKILKEHGVNPRVMGVEVISDSMVATG LEYAALKVYNATKKVLDEAWPEISPR

MRNYCTKTFGSAFSVTVVPTLKDNFSYLINDHTTHTLAAVDVNADYKPILTYIEEHLKQQGNADVTYT FSTILSTHKHWDHSGGNAKLKAELEAMNSTVPVVVVGGANDSIPAVTKPVREGDRVQVGDLSVEVID APCHTRGHVLYKVQHPQHPNDGVALFTGDTMFIAGIGAFFEGDEKDMCRAMEKVYHIHKGNDYAL DKVTFIFPGHEYTSGFMTFSEKTFPDRASDDLAFIQAQRAKYAAAVKTGDPSVPSSLAEEKRQNLFLRV ADPAFVAKMNQGNAHALMMYLYNACD

MASQLDSGTPAREASSALRDGYRQAGVSGRVRSYLDLLAGLSDFREHFDGSDGFSLDLVDMADGPG EVTVICCAGTAAISGPHEFTRLAGALRGIAPVRAVPQPGYEEGEPLPSSMAAVAAVQADAVIRTQGDK PFVVAGHSAGALMAYALATELLDRGHPPRGVVLIDVYPPGHQDAMNAWLEELTATLFDRETVRMD DTRLTALGAYDRLTGQWRPRETGLPTLLVSAGEPMGPWPDDSWKPTWPFEHDTVAVPGDHFTMV QEHADAIARHIDAWLGGGNSSSVDKLAAALE

MHAFPLTLDNRLAEALPLWRNLARTDRAPRRNIDLADWKADWRELIAALDRFSRSHGYRQPFAAQG HAALENAWAWGQAAENASTLLLKAIDRGLAGAELRSIYLETAALWLDYSRLLGAARDSLREQGEVDF ETAPALAPRTGQYPFALQLLAMGVLLDAQELIPALVEEVLQFDTDRLLDYLGAAALGLTSASEETFHPR PFGQLRAFFEEADGSDAQALAPYLQSQYREFFQLSPKAQKKTRRLTGPYAWGWWAMEVSALGVLY GWDDGVLRASPHYLGDLVDYARARGDA

>DM\_validata349

MSLRRGIYHIENAGVPSAIDLKDGSSSDGTPIVGWQFTPDTINWHQLWLAEPIPNVADTFTLCNLFSG TYMDLYNGSSEAGTAVNGWQGTAFTTNPHQLWTIKKSSDGTSYKIQNYGSKTFVDLVNGDSSDGA KIAGWTGTWDEGNPHQKWYFNRMSVSSAEAQAAIARNPHIHGTYRGYILDGEYLVLPNATFTQIWK DSGLPGSKWREQIYDCDDFAIAMKAAVGKWGADSWKANGFAIFCGVMLGVNKAGDAAHAYNFTL TKDHADIVFFEPQNGGYLNDIGYDSYMAFY

MVVSIGVFDGVHIGHQKVLRTMKEIAFFRKDDSLIYTISYPPEYFLPDFPGLLMTVESRVEMLSRYARTV VLDFFRIKDLTPEGFVERYLSGVSAVVVGRDFRFGKNASGNASFLRKKGVEVYEIEDVVVQGKRVSSSLI RNLVQEGRVEEIPAYLGRYFEIEGIVHKDREFGRKLGFPTANIDRGNEKLVDLKRGVYLVRVHLPDGKKK FGVMNVGFRPTVGDARNVKYEVYILDFEGDLYGQRLKLEVLKFMRDEKKFDSIEELKAAIDQDVKSAR NMIDDIINSKFEKEG

>DM validata351

SIERLGYLGFAVKDVPAWDHFLTKSVGLMAAGSAGDAALYRADQRAWRIAVQPGELDDLAYAGLEV DDAAALERMADKLRQAGVAFTRGDEALMQQRKVMGLLCLQDPFGLPLEIYYGPAEIFHEPFLPSAPV SGFVTGDQGIGHFVRCVPDTAKAMAFYTEVLGFVLSDIIDIQMGPETSVPAHFLHCNGRHHTIALAAF PIPKRIHHFMLQANTIDDVGYAFDRLDAAGRITSLLGRHTNDQTLSFYADTPSPMIEVEFGWGPRTVD SSWTVARHSRTAMWGHKSVRGOR

>DM validata352

GKQQNFVRQTTKYWVHPDNITELKLIILKHLPVLVFNTNKEFEREDSAITSIYFDNENLDLYYGRLRKDE GAEAHRLRWYGGMSTDTIFVERKTHREDWTGEKSVKARFALKERHVNDFLKGKYTVDQVFAKMRKE GKKPMNEIENLEALASEIQYVMLKKKLRPVVRSFYNRTAFQLPGDARVRISLDTELTMVREDNFDGVD RTHKNWRRTDIGVDWPFKQLDDKDICRFPYAVLEVKLQTQLGQEPPEWVRELVGSHLVEPVPKFSKFI

## **HGVATLLNDKVDSIPFWLPQ**

KIGVLQFVSHPSLDLIYKGIQDGLAEEGYKDDQVKIDFMNSEGDQSKVATMSKQLVANGNDLVVGIA TPAAQGLASATKDLPVIMAAITDPIGANLVKDLKKPGGNVTGVSDHNPAQQQVELIKALTPNVKTIG ALYSSSEDNSKTQVEEFKAYAEKAGLTVETFAVPSTNEIASTVTVMTSKVDAIWVPIDNTIASGFPTVVS SNQSSKKPIYPSATAMVEVGGLASVVIDQHDLGVATGKMIVQVLKGAKPADTPVNVFSTGKSVINKKI AQELGITIPESVLKEAGOVI

>DM validata354

MSKKHPIISVTGSSGAGTSTVKHTFDQIFRREGVKAVSIEGDAFHRFNRADMKAELDRRYAAGDATFS HFSYEANELKELERVFREYGETGQGRTRTYVHDDAEAARTGVAPGNFTDWRDFDSDSHLLFYEGLHG AVVNSEVNIAGLADLKIGVVPVINLEWIQKIHRDRATRGYTTEAVTDVILRRMHAYVHCIVPQFSQTDI NFQRVPVVDTSNPFIARWIPTADESVVVIRFRNPRGIDFPYLTSMIHGSWMSRANSIVVPGNKLDLAM OLILTPLIDRVVRESKVA

>DM\_validata356

MSLIRMALAAVCALLFSITTMTPFVQASEITISGSTSVARIMDVLAEKYNQQHPETYVAVQGVGSTAGI SLLKKGVADIAMTSRYLTESEAQNTLHTFTLAFDGLAIVVNQANPVTNLTREQLYGIYKGQITNWKQV GGNDQKIAVVTREASSGTRYSFESLMGLTKTVKDREVSDVAPTALVVNSNSMMKTLVNHNTQAVGF ISIGSVDKSVKAIQFEKADPTSDNIAKHTYQLSRPFLILHYSDNADEQTKEFIAFLKSESAKKLIVEYGYIM PSDVEEGGSHHHHHH

>DM\_validata357

MRDLDREETYLVDRTGLALELRDLVGTGPVPGEAYPGPHAALGYGEGQFAALLSGLPDWGEEGTLFL LEGGYDLGEAAGMALLAETGRARVVRVGFRPGVEVHIPPSPLAPYRYLRFLLLATGREEVLRSVDEALL EERRRLGPEVPVEENPAKFLAYTLLERLPLFYSPLFRPLEGAVQTLFARVAKSLSLTPPPSALEFFLVGLEA RHEQGDPLAAVLLGPGEEAALAKEILESRVDALAEVPATGANRLAQVMALWYRMAWTAYYLALLYG VDPGDHGLLERLREVT

>DM validata358

GMNQAMDTKQIAPFTLALPEGEALPLVCDSPHSGTFYPADFGAVVAPERLRGGEDTHVDALWEAVP RVGGTLLAATFPRVYIDPNRMLDDIDPAQLEGPWPTPLAPGEKTRLGYGLIWSNVDAATPIYDRKLTV AEVQRRINRYYRPYHAALTEAVEGAYQRFGAVWHLNLHSMPNNAYERLKIQSPRPLADFVLGDRDG TTCEPGLVDLVERELREKGYTVARNDPYKGVQLIAQIGRPAERRNSLQIEIRRPLYMEEGTRERNEGFAT LORDLTLLTLRIAEYVRRGV

>DM validata360

MAMRQCAIYGKGGIGKSTTTQNLVAALAEMGKKVMIVGCDPKADSTRLILHSKAQNTIMEMAAEAG TVEDLELEDVLKAGYGGVKCVESGGPEPGVGCAGRGVITAINFLEEEGAYEDDLDFVFYDVGDVVCG GFAMPIRENKAQEIYIVCSGEMMAMYAANNISKGIVKYANSGSVRLGGLICNSRNTDREDELIIALANK LGTQMIHFVPRDNVVQRAEIRRMTVIEYDPKAKQADEYRALARKVVDNKLLVIPNPITMDELEELLME FGIMEVEDESIVGKTAEEV

>DM validata361

MVDIIIAEHAGFCFGVKRAVKLAEESLKESQGKVYTLGPIIHNPQEVNRLKNLGVFPSQGEEFKEGDTVII RSHGIPPEKEEALRKKGLKVIDATCPYVKAVHEAVCQLTREGYFVVLVGEKNHPEVIGTLGYLRACNGK GIVVETLEDIGEALKHERVGIVAQTTQNEEFFKEVVGEIALWVKEVKVINTICNATSLRQESVKKLAPEV DVMIIIGGKNSGNTRRLYYISKELNPNTYHIETAEELQPEWFRGVKRVGISAGASTPDWIIEQVKSRIQEI CEGQLVSS

>DM\_validata363

KEFTLDFSTAKTYVDSLNVIRSAIGTPLQTISSGGTSLLMIDSGTGDNLFAVDVRGIDPEEGRFNNLRLIV ERNNLYVTGFVNRTNNVFYRFADFSHVTFPGTTAVTLSGDSSYTTLQRVAGISRTGMQINRHSLTTSY LDLMSHSGTSLTQSVARAMLRFVTVTAEALRFRQIQRGFRTTLDDLSGRSYVMTAEDVDLTLNWGRL SSVLPDYHGQDSVRVGRISFGSINAILGSVALILNCHHHASRVARMASDEFPSMCPADGRVRGITHN KILWDSSTLGAILM

>DM validata364

MANIVNFTDKQFENRLNDNLEELIQGKKAVESPTAFLLGGQPGSGKTSLRSAIFEETQGNVIVIDNDTF KQQHPNFDELVKLYEKDVVKHVTPYSNRMTEAIISRLSDQGYNLVIEGTGRTTDVPIQTATMLQAKGY ETKMYVMAVPKINSYLGTIERYETMYADDPMTARATPKQAHDIVVKNLPTNLETLHKTGLFSDIRLYN REGVKLYSSLETPSISPKETLEKELNRKVSGKEIQPTLERIEQKMVLNKHQETPEFKAIQQKLESLQPPTPP IPKTPKLPGI

>DM\_validata365

ASMTGGQQMGRGSASLPACPEESPLLVGPMLIEFNMPVDLELVAKQNPNVKMGGRYAPRDCVSPH KVAIIIPFRNRQEHLKYWLYYLHPVLQRQQLDYGIYVINQAGDTIFNRAKLLNVGFQEALKDYDYTCFV FSDVDLIPMNDHNAYRCFSQPRHISVAMDKFGFSLPYVQYFGGVSALSKQQFLTINGFPNNYWGW GGEDDDIFNRLVFRGMSISRPNAVVGTTRHIRHSRDKKNEPNPQRFDRIAHTKETMLSDGLNSLTYQ VLDVQRYPLYTQITVDIGTPS

>DM validata366

MTMMDMNFKYCHKIMKKHSKSFSYAFDLLPEDQRKAVWAIYAVCRKIDDSIDVYGDIQFLNQIKEDI QSIEKYPYEYHHFQSDRRIMMALQHVAQHKNIAFQSFYNLIDTVYKDQHFTMFETDAELFGYCYGVA GTVGEVLTPILSDHETHQTYDVARRLGESLQLINILRDVGEDFENERIYFSKQRLKQYEVDIAEVYQNGV NNHYIDLWEYYAAIAEKDFRDVMDQIKVFSIEAQPIIELAARIYIEILDEVRQANYTLHERVFVEKRKKAK LFHEINSKYHRI

>DM validata367

MNRLKNMSKYSDAKELASLTLGKKTEYANQYDPSLLQPVPRSLNRNDLHLSATLPFQGCDIWTLYELS WLNQKGLPQVAIGEVSIPATSANLIESKSFKLYLNSYNQTRFASWDEVQTRLVHDLSACAGETVTVNV KSLNEYTAEPIVTMQGECIDDQDIEIANYEFDDALLQGAAQGEEVSEVLHSHLLKSNCLITNQPDWGS VEIAYHGAKMNREALLRYLVSFREHNEFHEQCVERIFTDIMRYCQPQSLTVYARYTRRGGLDINPFRSS HOSAPNHNORMARO

>DM validata368

MIAITGATGQLGHYVIESLMKTVPASQIVAIVRNPAKAQALAAQGITVRQADYGDEAALTSALQGVEK LLLISSSEVGQRAPQHRNVINAAKAAGVKFIAYTSLLHADTSPLGLADEHIETEKMLADSGIVYTLLRNG WYSENYLASAPAALEHGVFIGAAGDGKIASATRADYAAAAARVISEAGHEGKVYELAGDSAWTLTQL AAELTKQSGKQVTYQNLSEADFAAALKSVGLPDGLADMLADSDVGASKGGLFDDSKTLSKLIGHPTT TLAESVSHLFNVNN

>DM validata369

GMVKDKNDVGPKTVAILGAGGKMGARITRKIHDSAHHLAAIEIAPEGRDRLQGMGIPLTDGDGWIDE ADVVVLALPDNIIEKVAEDIVPRVRPGTIVLILDAAAPYAGVMPERADITYFIGHPCHPPLFNDETDPAA RTDYHGGIAKQAIVCALMQGPEEHYAIGADICETMWSPVTRTHRVTTEQLAILEPGLSEMVAMPFVE TMVHAVDECADRYGIDRQAALDFMIGHLNVEIAMWFGYSPKVPSDAALRLMEFAKDIVVKEDWREA LNPAKVKOAAELIAGK

>DM validata370

MKYIGAHVSAAGGLANAAIRAAEIDATAFALFTKNQRQWRAAPLTTQTIDEFKAACEKYHYTSAQILP HDSYLINLGHPVTEALEKSRDAFIDEMQRCEQLGLSLLNFHPGSHLMQISEEDCLARIAESINIALDKTQ GVTAVIENTAGQGSNLGFKFEHLAAIIDGVEDKSRVGVCIDTCHAFAAGYDLRTPAECEKTFADFART VGFKYLRGMHLNDAKSTFGSRVDRHHSLGEGNIGHDAFRWIMQDDRFDGIPLILETINPDIWAEEIA WLKAQQTEKAVA

>DM\_validata371

DNNIENIGDGAEVVKRTEDTSSDKWGVTQNIQFDFVKDKKYNKDALILKMQGFINSKTTYYNYKNTD HIKAMRWPFQYNIGLKTNDPNVDLINYLPKNKIDSVNVSQTLGYNIGGNFNSGPSTGGNGSFNYSKT ISYNQQNYISEVEHQNSKSVQWGIKANSFITSLGKMSGHDPNLFVGYKPYSQNPRDYFVPDNELPPL VHSGFNPSFIATVSHEKGSGDTSEFEITYGRNMDVTHATRRTTHYGNSYLEGSRIHNAFVNRNYTVKY EVNWKTHEIKVKGHN

>DM\_validata373

MTVAKAIFIKCGNLGTSMMMDMLLDERADREDVEFRVVGTSVKMDPECVEAAVEMALDIAEDFEPD FIVYGGPNPAAPGPSKAREMLADSEYPAVIIGDAPGLKVKDEMEEQGLGYILVKPDAMLGARREFLDP VEMAIYNADLMKVLAATGVFRVVQEAFDELIEKAKEDEISENDLPKLVIDRNTLLEREEFENPYAMVKA MAALEIAENVADVSVEGCFVEQDKERYVPIVASAHEMMRKAAELADEARELEKSNDAVLRTPHAPD GKVLSKRKFMEDPE

>DM validata374

>DM validata375

MASNYNSGLKIGAWVGTQPSESAIKSFQELQGRKLDIVHQFINWSTDFSWVRPYADAVYNNGSILMI TWEPWEYNTVDIKNGKADAYITRMAQDMKAYGKEIWLRPLHEANGDWYPWAIGYSSRVNTNETYI AAFRHIVDIFRANGATNVKWVFNVNCDNVGNGTSYLGHYPGDNYVDYTSIDGYNWGTTQSWGSQ WQSFDQVFSRAYQALASINKPIIIAEFASAEIGGNKARWITEAYNSIRTSYNKVIAAVWFHENKETDWR INSSPEALAAYREAIGAG

>DM\_validata376

MLNEKAIQDVDLYFQNIHGPEGRLASNETFDIVPGLSKDGAVQYQTYQFNEAPKHLQKQVKAGRIL MERFVAVASAAVNKKAPSNKEKYHYDIWKEVSNQLIPAFFTDPIKGEQNLNTTVKGVEVAKSVIQFAG NVIAGNVTGFATFLQNFGNGLSAEMNKTQANYNYLYAYSTHDLFQDTSGNVFYKPRFLIYGTHFKQE QKKIATSCASYQEVNLEFGVDTVGGTFRIEEYFSNETFKKKVDNFLDKYEGKAIDDADSYFDDIFNGVK PNKNYVYHHHHHH

>DM\_validata377

MGSDKIHHHHHHMAVNRFRLENGKEELALYQIQLLKDQSHNENEEDKVSSSSFRQRILGNLLQPPNE RPELPSGLYVLGLTGISGSGKSSVAQRLKNLGAYIIDSDHLGHRAYAPGGPAYQPVVEAFGTDILHKDG TINRKVLGSRVFGNKKQMKILTDIVWPVIAKLAREEMDVAVAKGKTLCVIDAAMLLEAGWQSMVHE VWTVVIPETEAVRRIVERDGLSEAAAQSRLQSQMSGQQLVEQSNVVLSTLWESHVTQSQVEKAWN LLQKRLPKAYQTRN

>DM\_validata378

MQNVLIVGVGFMGGSFAKSLRRSGFKGKIYGYDINPESISKAVDLGIIDEGTTSIAKVEDFSPDFVMLSS PVRTFREIAKKLSYILSEDATVTDQGSVKGKLVYDLENILGKRFVGGHPIAGTEKSGVEYSLDNLYEGKK VILTPTKKTDKKRLKLVKRVWEDVGGVVEYMSPELHDYVFGVVSHLPHAVAFALVDTLIHMSTPEVDL FKYPGGGFKDFTRIAKSDPIMWRDIFLENKENVMKAIEGFEKSLNHLKELIVREAEEELVEYLKEVKIKRM

>DM validata379

MSATGPFSIGERVQLTDAKGRRYTMSLTPGAEFHTHRGSIAHDAVIGLEQGSVVKSSNGALFLVLRPLL VDYVMSMPRGPQVIYPKDAAQIVHEGDIFPGARVLEAGAGSGALTLSLLRAVGPAGQVISYEQRADH AEHARRNVSGCYGQPPDNWRLVVSDLADSELPDGSVDRAVLDMLAPWEVLDAVSRLLVAGGVLM VYVATVTQLSRIVEALRAKQCWTEPRAWETLQRGWNVVGLAVRPQHSMRGHTAFLVATRRLAPGA VAPAPLGRKREGRDG

>DM\_validata380

MNIIGFSKALFSTWIYYSPERILFDAGEGVSTTLGSKVYAFKYVFLTHGHVDHIAGLWGVVNIRNNGM GDREKPLDVFYPEGNRAVEEYTEFIKRANPDLRFSFNVHPLKEGERVFLRNAGGFKRYVQPFRTKHVSS EVSFGYHIFEVRRKLKKEFQGLDSKEISRLVKEKGRDFVTEEYHKKVLTISGDSLALDPEEIRGTELLIHECT FLDARDRRYKNHAAIDEVMESVKAAGVKKVILYHISTRYIRQLKSVIKKYREEMPDVEILYMDPRKVFE

>DM\_validata381

GAMDRLRAAEHPRPDYVLLHISDTHLIGGDRRLYGAVDADDRLGELLEQLNQSGLRPDAIVFTGDLA DKGEPAAYRKLRGLVEPFAAQLGAELVWVMGNHDDRAELRKFLLDEAPSMAPLDRVCMIDGLRIIVL DTSVPGHHHGEIRASQLGWLAEELATPAPDGTILALHHPPIPSVLDMAVTVELRDQAALGRVLRGTD VRAILAGHLHYSTNATFVGIPVSVASATCYTQDLTVAAGGTRGRDGAQGCNLVHVYPDTVVHSVIPL GGGETVGTFVSP

>DM\_validata382

GETSVPPGSALVGPSCVMDDFRDPQRWKECAKQGKMPCYFDLIEENVYLTERKKNKSHRDIKRMQC ECTPLSKDERAQGEIACGEDCLNRLLMIECSSRCPNGDYCSNRRFQRKQHADVEVILTEKKGWGLRA AKDLPSNTFVLEYCGEVLDHKEFKARVKEYARNKNIHYYFMALKNDEIIDATQKGNCSRFMNHSCEP NCETQKWTVNGQLRVGFFTTKLVPSGSELTFDYQFQRYGKEAQKCFCGSANCRGYLGGENRVSIRA AGGKMKKERSRK

## >DM\_validata383

MEACPHIRYAFQNDKLLLQQASVGRLTLVNKTTILLRPMKTTTVDLGLYARPPEGHGLMLWGSTSRP VTSHVGIIDPGYTGELRLILQNQRRYNSTLRPSELKIHLAAFRYATPQMEEDKGPINHPQYPGDVGLDV SLPKDLALFPHQTVSVTLTVPPPSIPHHRPTIFGRSGLAMQGILVKPCRWRRGGVDVSLTNFSDQTVFL NKYRRFCQLVYLHKHHLTSFYSPHSDAGVLGPRSLFRWASCTFEEVPSLAMGDSGLSEALEGRQGRG FGSSGO

## >DM validata384

PNIADKGSVFYHFSATSFDSVDGTRHYRVWTAVPNTTAPASGYPILYMLDGNAVMDRLDDELLKQLS EKTPPVIVAVGYQTNLPFDLNSRAYDYTPAAESRKTDLHSGRFSRKSGGSNNFRQLLETRIAPKVEQGL NIDRQRRGLWGHSYGGLFVLDSWLSSSYFRSYYSASPSLGRGYDALLSRVTAVEPLQFCTKHLAIMEG SATQGDNRETHAVGVLSKIHTTLTILKDKGVNAVFWDFPNLGHGPMFNASFRQALLDISGENANYTA GCHELSH

## >DM validata385

GSTKVKYVDKIHIGNYEIDAWYFSPFPEDYGKQPKLWLCEYCLKYMKYEKSYRFHLGQCQWRQPPGK EIYRKSNISVHEVDGKDHKIYCQNLCLLAKLFLDHRTLYFDVEPFVFYILTEVDRQGAHIVGYFSKEKESP DGNNVACILTLPPYQRRGYGKFLIAFSYELSKLESTVGSPEKPLSDLGKLSYRSYWSWVLLENLRDFRGT LSIKDLSQMTSITQNDIISTLQSLNMVKYWKGQHVICVTPKLVEEHLKSAQYKKPPITVDSVCLKWAPP

# >DM\_validata386

MIGKKSFQTNVYRMSKFDTYIFNNLYINDYKMFWIDSGIAKLIDKNCLVSYEINSSSIILLKKNSIQRFSLT SLSDENINVSVITISDSFIRSLKSYILGDLMIRNLYSENKDLLLWNCEHNDIAVLSEVVNGFREINYSDEFL KVFFSGFFSKVEKKYNSIFITDDLDAMEKISCLVKSDITRNWRWADICGELRTNRMILKKELESRGVKFRE LINSIRISYSISLMKTGEFKIKQIAYQSGFASVSYFSTVFKSTMNVAPSEYLFMLTGVAEK

#### >DM validata387

KGAELGILIKNADALEVAEKVTAVIFDKTGTLTKGKPEVTDLVPLNGDERELLRLAAIAERRSEHPIAEAIV KKALEHGIELGEPEKVEVIAGEGVVADGILVGNKRLMEDFGVAVSNEVELALEKLEREAKTAVIVARNG RVEGIIAVSDTLKESAKPAVQELKRMGIKVGMITGDNWRSAEAISRELNLDLVIAEVLPHQKSEEVKKL QAKEVVAFVGDGINDAPALAQADLGIAVGSGSDVAVESGDIVLIRDDLRDVVAAIQLSRKTMSKIK

>DM validata388

ARIRAPQEATVKEVHDAPAVRGSIIANMLQEHDNPFTLYPYDTNYLIYTQTSDLNKEAIASYDWAENA RKDEVKFQLSLAFPLWRGILGPNSVLGASYTQKSWWQLSNSEESSPFRETNYEPQLFLGFATDYRFAG WTLRDVEMGYNHDSNGRSDPTSRSWNRLYTRLMAENGNWLVEVKPWYVVGNTDDNPDITKYMG YYQLKIGYHLGDAVLSAKGQYNWNTGYGGAELGLSYPITKHVRLYTQVYSGYGESLIDYNFNQTRVG VGVMLNDLF

>DM\_validata389

MSLITVNTLQKMKAAGEKIAMLTAYESSFAALMDDAGVEMLLVGDSLGMAVQGRKSTLPVSLRDMC YHTECVARGAKNAMIVSDLPFGAYQQSKEQAFAAAAELMAAGAHMVKLEGGVWMAETTEFLQMR GIPVCAHIGLTPQSVFAFGGYKVQGRGGKAQALLNDAKAHDDAGAAVVLMECVLAELAKKVTETVS CPTIGIGAGADCDGQVLVMHDMLGIFPGKTAKFVKNFMQGHDSVQAAVRAYVAEVKAKTFPAAEHI FADEGGSHHHHHH

>DM\_validata390

SNTSWRKSEVLAVPLQPTLQQEVILARMEQILASRALTDDERAQLLYERGVLYDSLGLRALARNDFSQ ALAIRPDMPEVFNYLGIYLTQAGNFDAAYEAFDSVLELDPTYNYAHLNRGIALYYGGRDKLAQDDLLA FYQDDPNDPFRSLWLYLAEQKLDEKQAKEVLKQHFEKSDKEQWGWNIVEFYLGNISEQTLMERLKA DATDNTSLAEHLSETNFYLGKYYLSLGDLDSATALFKLAVANNVHNFVEHRYALLELSLLGQDQDDLA ESDOO

>DM\_validata391

MAQKPVADALTLELEPVVEANMTRHLDTEDIWFAHDYVPFDQGENFAFLGGRDWDPSQSTLPRTIT DACEILLILKDNLAGHHRELVEHFILEDWWGRWLGRWTAEEHLHAIALREYLVVTREVDPVANEDVR VQHVMKGYRAEKYTQVETLVYMAFYERCGAVFCRNLAAQIEEPILAGLIDRIARDEVRHEEFFANLVT HCLDYTRDETIAAIAARAADLDVLGADIEAYRDKLQNVADAGIFGKPQLRQLISDRITAWGLAGEPSLK OFVTG

## >DM\_validata392

GMTSRSPFESFVWQSEIFNCQSNDIDAFYAQLAEEVNRLGLKKNTLGSVDSFAINLYQSASQRSDLPS LLISSGFHGEEAAGPWGMLHFLRGLQPALFERVNLSLLPLVNPTGFKAGHRFNRFGENPNRGFTLENG KPTPNEHTSLEGKLLLEHAQLLCAASRDGILTCHEDVLMNETYVYSFEPTQTPGRFSLGLRDALGQYFK LAKDGFIDECPVTDGVIFNHFDTSFEAFLVRSGAKLAACSETPGQEDFDRRVQANSAAMGQFIAHCA PIL

## >DM validata393

GMTRRIAICAPSTPFTREDSARVIALAAAEFPDLSLSFHEQCFASEGHFAGSDALRLSAFLECANDDAFE AVWFVRGGYGANRIAEDALARLGRAASAKQYLGYSDAGTLLAALYAHRIGRSVHAPMPVDIRRPEGE SAVRRTLGWLAGAREGLEPTLGAGAPAVAFNLMTLAMLCGTRLLPDLSGHVVMIEEVAEHHYAVDR LLFHVTSCLADAGIAGLRLGRVSDVPENDRPFGCSVEEMARHWCHRAGIAFLGTADIGHDVDNRIVP FGLA

## >DM validata395

MSEIVKFNPVMASGFGAYIDHRDFLEAKTETIKNLLMRQGFVVVKNLDIDSDTFRDIYSAYGTIVEYAD EKIGVGFGYRDTLKLEGEKGKIVTGRGQLPFHADGGLLLSQVDQVFLYAAEIKNVKFRGATTVCDHAL ACQEMPAHLLRVLEEETFEVRVLERGYYVDVSPDGWFKVPVFTDLGWVRKMLIYFPFDEGQPASWEP RIVGFTDHETQAFFQELGAFLKQPRYYYKHFWEDGDLLIMDNRRVIHEREEFNDDDIVRRLYRGQTAD I

# >DM\_validata398

#### >DM validata399

GTQPTFGFTVNWKFSESTTVFTGQCFIDRNGKEVLKTMWLLRSSVNDIGDDWKATRVGINIFTRLRTQ KEGGSGGSARKCSLTGKWTNDLGSNMTIGAVNSRGEFTGTYITAVTATSNEIKESPLHGTQNTINKSG GSTTVFTGQCFIDRNGKEVLKTMWLLRSSVNDIGDDWKATRVGINIFTRLRTQKEGGSGGSARKCSLT GKWTNDLGSNMTIGAVNSRGEFTGTYITAVTATSNEIKESPLHGTQNTINKRTQPTFGFTVNWKFSE

>DM validata400

QLQQQEDDRILGLPGQPNGVAFGMYGGYVTIDDNNGRALYYWFQEADTADPAAAPLVLWLNGGP GCSSIGLGAMQELGAFRVHTNGESLLLNEYAWNKAANILFAESPAGVGFSYSNTSSDLSMGDDKMA QDTYTFLVKWFERFPHYNYREFYIAGESGHFIPQLSQVVYRNRNNSPFINFQGLLVSSGLTNDHEDMI GMFESWWHHGLISDETRDSGLKVCPGTSFMHPTPECTEVWNKALAEQGNINPYTIYTPTCDREPSPY ORRFW

>DM\_validata401

VLLKEYRVILPVSVDEYQVGQLYSVAEASKNETGGGEGVEVLVNEPYEKDDGEKGQYTHKIYHLQSKV PTFVRMLAPEGALNIHEKAWNAYPYCRTVITNEYMKEDFLIKIETWHKPDLGTQENVHKLEPEAWKH VEAIYIDIADRSQVLSKDYKAEEDPAKFKSVKTGRGPLGPNWKQELVNQKDCPYMCAYKLVTVKFKW WGLQNKVENFIHKQEKRLFTNFHRQLFCWLDKWVDLTMDDIRRMEEETKRQLDEMRQKDPVKGM TADD

>DM\_validata403

>DM\_validata404

>DM validata405

GAMADRDRLRPPLDERSLRDQLIGAGSGWRQLDVVAQTGSTNADLLARAASGADIDGVVLIAEHQT

AGRGRHGRGWAATARAQIILSVGVRVVDVPVQAWGWLSLAAGLAVLDSVAPLIAVPPAETGLKWP NDVLARGGKLAGILAEVAQPFVVLGVGLNVTQAPEEVDPDATSLLDLGVAAPDRNRIASRLLRELEAR IIQWRNANPQLAADYRARSLTIGSRVRVELPGGQDVVGIARDIDDQGRLCLDVGGRTVVVSAGDVV HI R

#### >DM validata406

#### >DM validata407

## >DM validata408

#### >DM validata409

GMMFKWPWKADDESGNAEMPWEQALAIPVLAHLSSTEQHKLTQMAARFLQQKRLVALQGLELTP LHQARIAMLFCLPVLELGIEWLDGFHEVLIYPAPFIVDDEWEDDIGLVHNQRVVQSGQSWQQGPVVL NWLDIQDSFDASGFNLVVHEVAHKLDTRNGDRASGVPLIPLREVAGWEHDLHAAMNNIQDEIDLV GESAASIDAYAATDPAECFAVLSEYFFSAPELFAPRFPALWQRFCHFYRQDPLARRRENGLQDEGDRR IVH

>DM validata410

## >DM validata411

## >DM\_validata412

#### >DM\_validata413

# >DM validata414

>DM\_validata416

MAKMRISPELKKLIEKYRCVKDTEGMSPAKVYKLVGENENLYLKMTDSRYKGTTYDVEREKDMMLWL EGKLPVPKVLHFERHDGWSNLLMSEADGVLCSEEYEDEQSPEKIIELYAECIRLFHSIDISDCPYTNSLDS RLAELDYLLNNDLADVDCENWEEDTPFKDPRELYDFLKTEKPEEELVFSHGDLGDSNIFVKDGKVSGFI DLGRSGRADKWYDIAFCVRSIREDIGEEQYVELFFDLLGIKPDWEKIKYYILLDELF

>DM validata417

>DM validata419

GLAESLELPKAIQDQLPRLQQLLKTLEEGLEGLEDAPPVELQLLHECSPSQMDLLCAQLQLPQLSDLGL LRLCTWLLALSPDLSLSNATVLTRSLFLGRILSLTSSASRLLTTALTSFAAKYTYPVCSALLDPVLQAPGTG PAQTELLCCLVKMESLEPDAQVLMLGQILELPWKEETFLVLQSLLERQVEMTPEKFSVLMEKLCKKGLA ATTSMAYAKLMLTVMTKYQANITETQRLGLAMALEPNTTFLRKSLKAALKHLGP

>DM\_validata420

MPQSAVMNVMVQAAMKAGRSLVRDYGEVQNLQVSLKGPADYVSQADRKAEKIIFNELSKARPKFG FLMEESEEIIGEDSQHRFIVDPLDGTTNFLHGIPFFAVSIALESQGKIVAGVIYNPINDELFTAERGSGAFF NDRRCRVSARRRLEDCVIATGMPHLGRPGHGTYLIELRNVMAEVSGIRRFGTAALDLAYVAAGRTDG FWEDNLQIWDMAAGILMVREAGGFVTDKEGGNDIFRKKNIIAGNEHIRIKLERALKKGI

>DM\_validata421

>DM\_validata422

>DM\_validata423

#### >DM validata424

>DM\_validata425

>DM validata428

SQFVGSDGMGGDAAAPGAAGTQAELPHRRFEYKYSFKGPHLVQSDGTVPFWAHAGNAIPSADQIRI APSLKSQRGSVWTKTKAAFENWEVEVTFRVTGRGRIGADGLAIWYTENQGLDGPVFGSADMWNGV GIFFDSFDNDGKKNNPAIVVVGNNGQINYDHQNDGATQALASCQRDFRNKPYPVRAKITYYQKTLT VMINNGFTPDKNDYEFCAKVENMVIPTQGHFGISAATGGLADDHDVLSFLTFQLTEPGKEPPT

#### >DM validata429

#### >DM validata430

# >DM\_validata431

## >DM\_validata432

#### >DM\_validata433

GMTEAFPALVRQDDARYAITVGPDLAVGPPGHAYLFGGASMALALDVAAETVGRPVVQGSLQFVSF TPLGSVLDLTVEVLQSGRTLAQARVAGTVDGRLVFHSGISLGMREGFSARQWALAPPVPQPDNCPP CTTLPAQDDNARYLEGIEVREAGGPEVPSGRTRLWLRRKDGAPLDAASLAMFADFLPIALGRATGCS

>DM\_validata434

MQQSVCRARPIWWGTQRRGSETMAGAAVKYLSQEEAQAVDQELFNEYQFSVDQLMELAGLSCAT AIAKAYPPTSMSKSPPTVLVICGPGNNGGDGLVCARHLKLFGYQPTIYYPKRPNKPLFTGLVTQCQKM DIPFLGEMPPEPMMVDELYELVVDAIFGFSFKGDVREPFHSILSVLSGLTVPIASIDIPSGWDVEKGNPS GIQPDLLISLTAPKKSATHFTGRYHYLGGRFVPPALEKKYQLNLPSYPDTECVYRLQ

>DM\_validata435

MKDLKKIESYLDKLRIKEKDGEERKIYAEVLDGRTLKTLYKLSAKGYITAMGGVISTGKEANVFYADGVF DGKPVAMAVKIYRIETSEFDKMDEYLYGDERFDMRRISPKEKVFIWTEKEFRNLERAKEAGVSVPQPYT YMKNVLLMEFIGEDELPAPTLVELGRELKELDVEGIFNDVVENVKRLYQEAELVHADLSEYNIMYIDKV YFIDMGQAVTLRHPMAESYLERDVRNIIRFFSKYGVKADFEEMLKEVKGE

>DM\_validata436

MKEKSIEDIVFEKFQPYINWSIDKLCEHFSINKGEKGLNYRIASAILNLKGKTTKSKPFPEVEEFEKSSIVVK TVHFNKKNVNKESMSFGAFKFEELANEEWEDSEGYPSAQWRNFLLETRFLFFVVKEDEDGVDIFKGIK FFSMPEEDINGPVKRMWDDTVKKLKEGVTLEAVPDKSTKDGWRIKNNFVDKSDDLICHVRPHTNNR DYRGGSNADKLPKKINWINRPDSDDYSDEWMTKOSFWINNDYIKKOVEDLL

>DM validata438

SFIKPIYQDINSILIGQKVKRPKSGTLSGHAAGEPFEKLVYKFLKENLSDLTFKQYEYLNDLFMKNPAIIGH EARYKLFNSPTLLFLLSRGKAATENWSIENLFEEKQNDTADILLVKDQFYELLDVKTRNISKSAQAPNIIS AYKLAQTCAKMIDNKEFDLFDINYLEVDWELNGEDLVCVSTSFAELFKSEPSELYINWAAAMQIQFHV RDLDQGFNGTREEWAKSYLKHFVTQAEQRAISMIDKFVKPFKKYIL

>DM\_validata439

MLTFALTIVRHGETQYNRDKLLQGQGIDTPLSDTGHQQAAAAGRYLKDLHFTNVFVSNLQRAIQTAE IILGNNLHSSATEMILDPLLRERGFGVAEGRPKEHLKNMANAAGQSCRDYTPPGGETLEQVKTRFKMF

LKSLFQRMFEEHGSALSSVPSEADQPVIAGLADDGAQNVPVHALMVSHGAFIRISVRHLVEDLQCCL PAGLKMNQVFSPCPNTGISRFIFTIHREESVLRATRIQGVFINRKDHLEEVKNSD

>DM validata440

GALPDPVKPKAPKAVNPFHLGMAGYTFVNFDLDTTLKTLERLDIHYLCIKDFHLPLNSTDEQIRAFHDK CAAHKVTGYAVGPIYMKSEEEIDRAFDYAKRVGVKLIVGVPNYELLPYVDKKVKEYDFHYAIHLHGPDI KTYPDATDVWVHTKDLDPRIGMCLDVGHDLRNGCDPVADLKKYHTRVFDMHIKDVTDSSKAGVGIE IGRGKIDFPALIRMMREVNYTGMCSLEYEKDMKDPFLGIAESIGYFKAVSDLT

>DM\_validata441

MSLRIPRIYHPISLENQTQCYLSEDAANHVARVLRMTEGEQLELFDGSNHIYPAKIIESNKKSVKVEILGR ELADKESHLKIHLGQVISRGERMEFTIQKSVELGVNVITPLWSERCGVKLDAERMDKKIQQWQKIAIAA CEQCGRNIVPEIRPLMKLQDWCAENDGALKLNLHPRAHYSIKTLPTIPAGGVRLLIGSEGGLSAQEIAQ TEQQGFTEILLGKRVLRTETASLAAISALQICFGDLGEEGGSHHHHHH

>DM\_validata442

EMETYVNKLHEGSTYTAAVQYNVLEKDDDPASLTIWVPMFQSSMPADLLIKELANVNILVKQISTPKG PSLRVMINSRSAVLAQMPSKFTICANVSLDDRSKLAYDVTTPCEIKACSLTCLKSKNMLTTVKDLTMKT LNPTHDIIALCEFENIVTSKKVIIPTYLRSISVRNKDLNTLENITTTEFKNAITNAKIIPYSGLLLVITVTDNKG AFKYIKPQSQFIVDLGAYLEKESIYYVTTNWKHTATRFAIKPRED

>DM\_validata443

FWRQTWSGPGTTKRFPETVLARCVKYTEIHPEMRHVDCQSVWDAFKGAFISKHPCDITEEDYQPLMK LGTQTVPCNKILLWSRIKDLAHQFTQVQRDMFTLEDTLLGYLADDLTWCGEFDTSKINYQSCPDWRK DCSNNPVSVFWKTVSRRFAEAACDVVHVMLDGSRSKIFDKDSTFGSVEVHNLQPEKVQTLEAWVIH GGREDSRDLCQDPTIKELESIISKRNIQFSCKNIYRPDKFLQCVKNPEDSSCTSEI

>DM validata444

MDNSHDSDSVFLYHIPCDNCGSSDGNSLFSDGHTFCYVCEKWTAGNEDTKERASKRKPSGGKPGTY

>DM\_validata445

SKAVTGMRTIDGKKYYFNTNTAEAATGWQTIDGKKYYFNTNTSIASTGYTIINDKHFYFNTDGIMQIG VFKGPDGFEYFAPANTDANNIEGQAIRYQNRFLYLHDNIYYFGNNSKAATGWVTIDGRRYYFEPNTAI GANGYKIIDNKNFYFRNGLPQIGVFKGPNGFEYFAPANTDANNIDGQAIRYQNRFLHLLGNIYYFGN NSKAVTGWQTINGNMYYFMPDTAMAAAGGLFEIDGVIYFFGVDGVKAPGIYG

>DM validata446

QGHMRVEVFPVEGLPLIKEGDDLAELISSRVRFEDGDVLVVCSTVISKAEGRIRRLEEFNPSERAKEIAAR IGKPAEFVQAVLEESEEVLLDFPFLLVKAKFGNVCVNAGIDASNVEEGSLLLPPLDPDGSAEKLRRRILEL TGKRVGVIITDTNGRCFRRGVVGFAIGISGVKAMKDWIGRKDLYGRELEVTVECVADEIAAFANLLMG EGGDGIPAVVVRGLNVAGEGSMEEIYRSEEEDVIRRCLKRCLGS

>DM\_validata447

DKGKSVKSTEKSVGMPPKTPKTDNNAHVDNEFLILQVNDAVFPIGSYTHSFGLETYIQQKKVTNKESA LEYLKANLSSQFLYTEMLSLKLTYESALQQDLKKILGVEEVIMLSTSPMELRLANQKLGNRFIKTLQAMN ELDMGEFFNAYAQKTKDPTHATSYGVFAASLGIELKKALRHYLYAQTSNMVINCVKSVPLSQNDGQK ILLSLQSPFNQLIEKTLELDESHLCTASVQNDIKAMQHESLYSRLYMS

>DM\_validata448

WMTGHHHHHHRQKWEWKVGTGLNGFGSVLNDLTNGGTKLTITVTGNKPILLGRTKEAFATPVTSG VDGIPHIAFTDYEGASVELRNPDGETEKGLAYFVLPMKNAEGTKVGSVKVNASYAGALGRGGVTSAD GELMSLFAEGSHAIFYGGLPTNVKNSELKGGSAAAARTELFGSLSKNDILGQIQRVNANITSLVNVPGS FNENMAYTDGSVVSVAYALGIANGQTIEATFNQAVTTSTQWSAPLNVAITYY

>DM validata449

AGHMEAVIEKECSALGGLFQTIISDMKGSYPVWEDFINKAGKLQSQLRTTVVAAAAFLDAFQKVADM ATNTRGGTREIGSALTRMCMRHRSIEAKLRQFSSALIDCLINPLQEQMEEWKKVANQLDKDHAKEYK KARQEIKKKSSDTLKLQKKAKKVDAQGRGDIQPQLDSALQDVNDKYLLLEETEKQAVRKALIEERGRF CTFISMLRPVIEEEISMLGEITHLQTISEDLKSLTMDPHKLPSSSEQVILD

#### >DM validata450

EPREFVLRPAPQGRTVRCRLTRDKKGMDRGMYPSYFLHLDTEKKVFLLAGRKRKRSKTANYLISIDPTN LSRGGENFIGKLRSNLLGNRFTVFDNGQNPQRGYSTNVASLRQELAAVIYETNVLGFRGPRRMTVIIP GMSAENERVPIRPRNASDGLLVRWQNKTLESLIELHNKPPVWNDDSGSYTLNFQGRVTQASVKNFQ IVHADDPDYIVLQFGRVAEDAFTLDYRYPLCALQAFAIALSSFDGKLACE

#### >DM validata451

AQELQTANEFTVHTDLSSISSTRAFLKEKHKAAKHIGVRADIPFDANQGIRLEAGFGRSKKNIINLETDE NKLGKTKNVKLPTGVPENRIDLYTGYTYTQTLSDSLNFRVGAGLGFESSKDSIKTTKHTLHSSRQSWLA KVHADLLSQLGNGWYINPWSEVKFDLNSRYKLNTGVTNLKKDINQKTNGWGFGLGANIGKKLGESA SIEAGPFYKORTYKESGEFSVTTKSGDVSLTIPKTSIREYGLRVGIKF

# >DM validata452

MSLTLTLTGTGGAQGVPAWGCECAACARARRSPQYRRQPCSGVVKFNDAITLIDAGLHDLADRWS PGSFQQFLLTHYHMDHVQGLFPLRWGVGDPIPVYGPPDEQGCDDLFKHPGLLDFSHTVEPFVVFDL QGLQVTPLPLNHSKLTFGYLLETAHSRVAWLSDTAGLPEKTLKFLRNNQPQVMVMDCSHPPRADAP RNHCDLNTVLALNQVIRSPRVILTHISHQFDAWLMENALPSGFEVGFDGMEIGVA

#### >DM\_validata454

AQTAAAATSRIKKFSIYRWDPDKPGDKPRMQTYEVDLNKCGPMVLDALIKIKNELDSTLTFRRSCREGI CGSCAMNIAGGNTLACTKKIDPDLSKTTKIYPLPHMYVVKDLVPDLSNFYAQYKSIEPYLKKKDESKQG KEQYLQSIEDRQKLDGLYECILCACCSTSCPSYWWNGDKYLGPAVLMQAYRWMIDSRDDYTEERLA OLODPFSLYRCHTIMNCTRTCPKGLNPGKAIAEIKKMMATYKEKAAAA

### >DM\_validata456

AMRTIYVIGIGTGSPEFLTLQAISGLRHAQAIVALDKGEQKSDLLALRQKIVDTHAPGTPIYAVTDPERD RNPDNYEEEVRRWHAERAHLLASTIRERTPDDGAVAFLVWGDPSLYDSTLRIIEHMRNLEDLHADVK VIPGITAVQVLTAEHGILINRIGEAIHITTGRNLPETSAKDRRNCVVMLDGKTAWQDVATEHTYMWW GAFLGTEQQVLRKGYVHEIGAQVAELKQQLRTEHGWIMDTYLLRELD

### >DM\_validata457

GMTISRNYDQEIKDTAGHKYAYNFDFDVMHPFMVRAFTPFFRPGNLLELGSFKGDFTSRLQEHFNDIT CVEASEEAISHAQGRLKDGITYIHSRFEDAQLPRRYDNIVLTHVLEHIDDPVALLKRINDDWLAEGGRL FLVCPNANAVSRQIAVKMGIISHNSAVTEAEFAHGHRCTYALDTLERDASRAGLQVTYRSGIFFKALA NFQWDQILQTDILSKEYLDGCYQLGQQYPDLCASIFLLCEKGINQ

### >DM\_validata458

LNKTLFLGYAFLLTMATTSDKLASRSKLPDGPTGSSEEEEEFLEIPPFNKQYTESQLRAGAGYILEDFNEA QCNTAYQCLLIADQHCRTRKYFLCLASGIPCVSHVWVHDSCHANQLQNYRNYLLPAGYSLEEQRILD WQPRENPFQNLKVLLVSDQQQNFLELWSEILMTGGAASVKQHHSSAHNKDIALGVFDVVVTDPSC PASVLKCAEALQLPVVSQEWVIQCLIVGERIGFKQHPKYKHDYVSH

#### >DM validata459

MGFMIEHWDFSTPMATQETTTAEHIQPNHWYHCERLHPDIRGWLEDNHVPRATVDHLLADESRPS FHPLDDDNFMLILRGINMNENASPEDMLSIRILYFQGALISTRKIPSRAIMEIRQALAEHKGPKSLASLL NQIIEGLNGKIDLYLDTIEETLNEFDVNDESTYNHIAAQKALISIKRFIRPQQYAIRDLIESESELVTSRPHQ YRFAHNNITRINETIEFYLGEVALFQDEIKHNRDEKTNKNS

# >DM validata460

HGNQLTAYTLRLGDNCLVLSQRLGEWCGHAPELEIDLALANIGLDLLGQARNFLSYAAELAGEGDED TLAFTRDERQFSNLLLVEQPNGNFADTIARQYFIDAWHVALFTRLMESRDPQLAAISAKAIKEARYHLR FSRGWLERLGNGTDVSGQKMQQAINKLWRFTAELFDADEIDIALSEEGIAVDPRTLRAAWEAEVFAGI NEATLNVPQEQAYRTGGKKGLHTEHLGPMLAEMQYLQRVLPGQQW

>DM validata461

MKSCAILAALGCLAGSVLGHGQVQNFTINGQYNQGFILDYYYQKQNTGHFPNVAGWYAEDLDLGFI SPDQYTTPDIVCHKNAAPGAISATAAAGSNIVFQWGPGVWPHPYGPIVTYVVECSGSCTTVNKNNL RWVKIQEAGINYNTQVWAQQDLINQGNKWTVKIPSSLRPGNYVFRHELLAAHGASSANGMQNYP QCVNIAVTGSGTKALPAGTPATQLYKPTDPGILFNPYTTITSYTIPGPALWQG

>DM validata462

MFKKYSSLENHYNSKFIEKLYSLGLTGGEWVAREKIHGTNFSLIIERDKVTCAKRTGPILPAEDFFGYEIILK NYADSIKAVQDIMETSAVVSYQVFGEFAGPGIQKNVDYCDKDFYVFDIIVTTESGDVTYVDDYMMES FCNTFKFKMAPLLGRGKFEELIKLPNDLDSVVQDYNFTVDHAGLVDANKCVWNAEAKGEVFTAEGY VLKPCYPSWLRNGNRVAIKCKNSKFSEKKKSDKPIKAKVELSE

>DM validata464

MALLEICCYSMECALTAQQNGADRVELCAAPKEGGLTPSLGVLKSVRQRVTIPVHPIIRPRGGDFCYS DGEFAAILEDVRTVRELGFPGLVTGVLDVDGNVDMPRMEKIMAAAGPLAVTFHRAFDMCANPLYTL NNLAELGIARVLTSGQKSDALQGLSKIMELIAHRDAPIIMAGAGVRAENLHHFLDAGVLEVHSSAGA WQASPMRYRNQGLSMSSDEHADEYSRYIVDGAAVAEMKGIIERHQAK

>DM\_validata465

DLPDKIETNVYCNLTPEQAAMYKAEVENLFNNIDSVTGIKRKGMILSTLLKLKQIVDHPALLKGGEQSV RRSGKMIRTMEIIEEALDEGDKIAIFTQFVDMGKIIRNIIEKELNTEVPFLYGELSKKERDDIISKFQNNPSV KFIVLSVKAGGFGINLTSANRVIHFDRWWNPAVEDQATDRVYRIGQTRNVIVHKLISVGTLEEKIDQLL AFKRSLFKDIISSGDSWITELSTEELRKVIELSVGGY

>DM\_validata466

MRGSHHHHHHGSVTCTGCVDLDELSFEKTVERFPYSVVKFDIASPYGEKHEAFTAFSKSAHKATKDLLI ATVGVKDYGELENKALGDRYKVDDKNFPSIFLFKGNADEYVQLPSHVDVTLDNLKAFVSANTPLYIGR DGCIKEFNEVLKNYANIPDAEQLKLIEKLQAKQEQLTDPEQQQNARAYLIYMRKIHEVGYDFLEEETKR LLRLKAGKVTEAKKEELLRKLNILEVFRVHKVTKTAPEKEEL

>DM\_validata467

MSLETKTPNDAKNQVQTHERMKTSSEHVTPLDFNYPIHIVQAPQNHHVVGILTPRIQVSDNLKPYID KFQDALINQIQTIFEKRGYQVLRFQDEKALNAQDKRKIFSVLDLKGWVGILEDLKMNLKDPNNPNLDT LVDQSSGSVWFNFYEPESNRVVHDFAVEVGTFQAMTYTYKHNNSGGLNSSNSIIHEYLEKNKEDAIH KILNRMYAVVMKKAVTELTKENIDKYREAIDRMKGFKSSMPOKKEG

>DM validata468

MLIILTGLPGVGKSTFSKNLAKILSKNNIDVIVLGSDLIRESFPVWKEKYEEFIKKSTYRLIDSALKNYWVIV DDTNYYNSMRRDLINIAKKYNKNYAIIYLKASLDVLIRRNIERGEKIPNEVIKKMYEKFDEPGKKYKWDE PFLIIDTTKDIDFNEIAKKLIEKSKEIPKFYVLEENKNKNNNISDKIDKETRKIVSEYIKSKKLDKDKIKEVVEL RKEFLKKIKKMEEVDADRVLKEFKDLLNSY

>DM validata470

TESPADSFLKVELELNLKLSNLVFQDPVQYVYNPLVYAWAPHENYVQTYCKSKKEVLFLGMNPGPFG MAQTGVPFGEVNHVRDWLQIEGPVSKPEVEHPKRRIRGFECPQSEVSGARFWSLFKSLCGQPETFFK HCFVHNHCPLIFMNHSGKNLTPTDLPKAQRDTLLEICDEALCQAVRVLGVKLVIGVGRFSEQRARKAL MAEGIDVTVKGIMHPSPRNPQANKGWEGIVRGQLLELGVLSLLTG

>DM validata471

MMKIVPPKPFFFEAGERAVLLLHGFTGNSADVRMLGRFLESKGYTCHAPIYKGHGVPPEELVHTGPDD WWQDVMNGYEFLKNKGYEKIAVAGLSLGGVFSLKLGYTVPIEGIVTMCAPMYIKSEETMYEGVLEYAR EYKKREGKSEEQIEQEMEKFKQTPMKTLKALQELIADVRDHLDLIYAPTFVVQARHDEMINPDSANIIY NEIESPVKQIKWYEQSGHVITLDQEKDQLHEDIYAFLESLDW

>DM\_validata473

APVTSPAWADDPPATVYRYDSRPPEDVFQNGFTAWGNNDNVLEHLTGRSCQVGSSNSAFVSTSSS RRYTEVYLEHRMQEAVEAERAGRGTGHFIGYIYEVRADNNFYGAASSYFEYVDTYGDNAGRILAGAL ATYQSEYLAHRRIPPENIRRVTRVYHNGITGETTTTEYSNARYVSQQTRANPNPYTSRRSVASIVGTLV RMAPVVGACMARQAESSEAMAAWSERAGEAMVLVYYESIAYSF

>DM\_validata474

VTAGAAPRILKHQVVRAELDRMLDGMRIGDPFPAEREIAEQFEVARETVRQALRELLIDGRVERRGRTT VVARPKIRQPLGMGSYTEAAKAQGLSAGRILVAWSDLTADEVLAGVLGVDVGAPVLQLERVLTTDGV RVGLETTKLPAQRYPGLRETFDHEASLYAEIRSRGIAFTRTVDTIDTALPDAREAALLGADARTPMFLLN RVSYDQDDVAIEQRRSLYRGDRMTFTAVMHAKNSAIVS

>DM\_validata475

MSKLELLPAVDVRDGQAVRLVHGESGTETSYGSPLEAALAWQRSGAEWLHLVDLDAAFGTGDNRA LIAEVAQAMDIKVELSGGIRDDDTLAAALATGCTRVNLGTAALETPEWVAKVIAEHGDKIAVGLDVRG TTLRGRGWTRDGGDLYETLDRLNKEGCARYVVTDIAKDGTLQGPNLELLKNVCAATDRPVVASGGV SSLDDLRAIAGLVPAGVEGAIVGKALYAKAFTLEEALEATSLEPG

>DM validata476

AQVPASGKLLVDPRYSTNDQEESILQDIITRFPNVVLMKQTAQLRAMMTIIRDKETPKEEFVFYADRLIR LLIEEALNELPFQKKEVTTPLDVSYHGVSFYSKICGVSIVRAGESMESGLRAVCRGVRIGKILIQRDETTAE PKLIYEKLPADIRERWVMLLDPMCATAGSVCKAIEVLLRLGVKEERIIFVNILAAPQGIERVFKEYPKVRM VTAAVDICLNSRYYIVPGIGDFGDRYFGTM

>DM\_validata477

IDFHVHLDLYPDPVAVARACEERQLTVLSVTTTPAAWRGTLALAAGRPHVWTALGFHPEVVSERAAD LPWFDRYLPETRFVGEVGLDGSPSLRGTWTQQFAVFQHILRRCEDHGGRILSIHSRRAESEVLNCLEA NPRSGTPILHWYSGSVTELRRAISLGCWFSVGPTMVRTQKGAALIRSMPRDRVLTETDGPFLELDGQA ALPWDVKSVVEGLSKIWQIPASEVERIVKENVSRLLGTVR

>DM validata478

MTVQIPKLLFLHGFLQNGKVFSEKSSGIRKLLKKANVQCDYIDAPVLLEKKDLPFEMDDEKWQATLDA DVNRAWFYHSEISHELDISEGLKSVVDHIKANGPYDGIVGLSQGAALSSIITNKISELVPDHPQFKVSVV ISGYSFTEPDPEHPGELRITEKFRDSFAVKPDMKTKMIFIYGASDQAVPSVRSKYLYDIYLKAQNGNKEK VLAYEHPGGHMVPNKKDIIRPIVEQITSSLQEASE

>DM\_validata479

GMAQNIYDQPDFFAGYSQLGRSIEGLDGAAEWPALRAMLPEVGGLRIVDLGCGFGWFCRWAHEHG ASYVLGLDLSEKMLARARAAGPDTGITYERADLDKLHLPQDSFDLAYSSLALHYVEDVARLFRTVHQA LSPGGHFVFSTEHPIYMAPARPGWAIDAEGRRTWPIDRYLVEGPRKTDWLAKGVVKHHRTVGTTLNA LIRSGFAIEHVEEFCPTDAOITARPELAEELDRPMFLLVSARR

>DM\_validata480

MNKIFIYAGVRNHNSKTLEYTKRLSSIISSRNNVDISFRTPFNSELEISNSDSEELFKKGIDRQSNADDGG VIKKELLESDIIIISSPVYLQNVSVDTKNFIERIGGWSHLFRLAGKFVVTLDVAESNGSDNVSEYLRDIFSY MGGQILHQVSITNSLKDIAEAQLMEATYKIEDVLEGKIKYKTTDYQERAYQTLKLILENYDSEHFEKMY WEKKRLFEANSLEEWYYVENIKLEHHHHHH

>DM\_validata481

HPHAMPDMGPDMNKVPWMGDEQIAMLVYPGMTVMDLVGPHCMFGSLMGAKIYIVAKSLDPVTS DAGLAIVPTATFGTCPRDLTVLFAPGGTDGTLAAASDAETLAFMADRGARAKYITSVCSGSLILGAAGL LKGYKATSHWSCRDALAGFGAIPTEARVVRDRNRITGAGVTAGLDFGLSMVAELRDQTYAECAQLM SEYDPDPPFNAGSMKTAPAHVRTAMIELVAEFTKKADALAGFPK

>DM\_validata482

MSGLHILAFGAHADDVEIGMAGTIAKYTKQGYEVGICDLTEADLSSNGTIELRKEEAKVAARIMGVKTR LNLAMPDRGLYMKEEYIREIVKVIRTYKPKLVFAPYYEDRHPDHANCAKLVEEAIFSAGIRKYMPELSPH RVESFYNYMINGFHKPNFCIDISEYLSIKVEALEAYESQFSTGSDGVKTPLTEGYVETVIAREKMFGKEVG VLYAEGFMSKKPVLLHADLLGGCKLGHHHHHH

>DM\_validata483

MPTKQQLLYEGKAKKIYATDEPDVLWVEYKDSATAFNGEKKATIAGKGRLNNEISSLLFLKLREAGIAN HFIEKLSPTEQLVRRVTIIPLEVVVRNVVAGSLAKRIGLEEGTPLEAPLVEFYYKNDDLGDPLLLEDHIFILK LASREEVAALKQAALAVNDVLRLHFAERNVRLIDFKLEFGRTADGAILLADEISPDTCRLWDAKTNEKL

### DKDVFRRDLGSLTDAYEVILQRLGGESACTK

# >DM\_validata484

GMRSNRVTQHPPLQLSLPVHLPDDETFTSYYPAAGNDELIGALKSAASGDGVQAIYLWGPVKSGRTH LIHAACARANELERRSFYIPLGIHASISTALLEGLEQFDLICIDDVDAVAGHPLWEEAIFDLYNRVAEQKR GSLIVSASASPMEAGFVLPDLVSRMHWGLTYQLQPMMDDEKLAALQRRAAMRGLQLPEDVGRFLL NRMARDLRTLFDVLDRLDKASMVHQRKLTIPFVKEMLRL

#### >DM\_validata485

GMSESCILFFVKYPEPGKVKTRLGEVVGNDKAAMLYRHFVQDMLQGLARLHADLHICYVPGDADLPE KFKAWLGPQHMFAAQQGLDLGERMKHAMQKAFDDGYDRVVLMGSDIPDYPCELVQKALNDLQH YDAAIGPAFDGGYYLIGFRKDSFCPDVFDGIRWGEADVYQPTVEKMRRARLEVLQLPDWNDVDTVW DLNVLYRTNKNSSFRRSSTYALLRENDALIRQYDIDLPGMAPVEKE

### >DM\_validata486

MDVAGLTDCGLIRKSNQDAFYIDEKHQRFFIVADGMGGHAGGEEASRLAVDHIRQYLETHLEDLQH DPVTLLRQAFLAANHAIVEQQRQNSARADMGTTAVVILLDEKGDRAWCAHVGDSRIYRWRKDQLQ QITSDHTWIAQAVQLGSLTIEQARQHPWRHVLSQCLGREDLSQIDIQPIDLEPGDRLLLCSDGLTEELT DDVISIYLSEPNVOKAAAALVDAAKTHGGRDNVTVVVISV

#### >DM validata487

ESQPDPKPDELHKSSKFTGLMENMKVLYDDNHVSAINVKSIDQFLYFDLIYSIKDTKLGNYDNVRVEFK NKDLADKYKDKYVDVFGANYYYQCYFSKKTNDINSHQTDKRKTCMYGGVTEHNGNQLDKYRSITVR VFEDGKNLLSFDVQTNKKKVTAQELDYLTRHYLVKNKKLYEFNNSPYETGYIKFIENENSFWYDMMPA PGDKFDQSKYLMMYNDNKMVDSKDVKIEVYLTTKKK

# >DM\_validata488

ASKGEELFTGVVPILVELDGDVNGHKFSVSGEGEGDATYGKLTLKFICTTGKLPVPWPTLVTTFSYGVQ CFSRYPDHMKRHDFFKSAMPEGYVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILG

HKLEYNYNSHNVYIMADKQKNGIKVNFKIRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQ SALSKDPNEKRDHMVLLEFVTAAGITHGMDELYK

>DM validata489

MTGSNSHITILTLNINGLNSAIKRHRLASWIKSQDPSVCCIQETHLTCRDTHRLKIKGWRKIYQANGKQ KKAGVAILVSDKTDFKPTKIKRDKEGHYIMVKGSIQQEELTILNIYAPNTGAPRFIKQVLSDLQRDLDSH TLIMGDFNTPLSTLDRSTRQKVNKDTQELNSALHQADLIDIYRTLHPKSTEYTFFSAPHHTYSKIDHIVG SKALLSKCKRTEIITNYLSDHSAIKLELR

>DM validata490

PEATSCETEGSSISFTVEKAGHVVRFNCPSTLEEIKPAYEAGDSTKVCTTADCSNEAALKDVLKSASLAQ AEGSGPSGGNDFTLTVDALPEAETSVFFLCQRTGASRSARRLGTAVPSDKCGVHILVKAAPQAPVCSA QDHTLELQITAANSDTSFVCGGTFNVIKPANAAKVLQGDSCETEVDLVSLVPHASRSALEQSGLIKLSV TDLPQQQQKLCYRCEDSSQKACKVLVTVSAS

>DM\_validata491

MVDNRMRFTIDQNMQFPLVEIDLEHGGSVYLQQGSMVYHTENVTLNTKLNGKGSGLGKLVGAIGR SMVSGESMFITQAMSNGDGKLALAPNTPGQIVALELGEKQYRLNDGAFLALDGSAQYKMERQNIGK ALFGGQGGLFVMTTEGLGTLLANSFGSIKKITLDGGTMTIDNAHVVAWSRELDYDIHLENGFMQSIGT GEGVVNTFRGHGEIYIQSLNLEQFAGTLKRYLPTSSN

>DM\_validata492

KECTIVPSNHYGPIPGIPVGTMWRFRVQVSESGVHRPHVAGIHGRSNDGAYSLVLAGGYEDDVDHG NFFTYTGSGGRDLSGNKRTAEQSCDQKLTNTNRALALNCFAPINDQEGAEAKDWRSGKPVRVVRN VKGGKNSKYAPAEGNRYDGIYKVVKYWPEKGKSGFLVWRYLLRRDDDEPGPWTKEGKDRIKKLGLT MQYPEGYLEALANREREKENSKREEEEQOEGGFASPRTG

>DM validata493

AQPDIKFASKEYGVTIGESRIIYPLDAAGVMVSVKNTQDYPVLIQSRIYDENKEKESEDPFVVTPPLFRLD

AKQQNSLRIAQAGGVFPRDKESLKWLCVKGIPPKDEDIWVDDATNKQKFNPDKDVGVFVQFAINNC IKLLVRPNELKGTPIQFAENLSWKVDGGKLIAENPSPFYMNIGELTFGGKSIPSHYIPPKSTWAFDLPKGL AGARNVSWRIINDQGGLDRLYSKNVTL

>DM\_validata494

MKTKEDMQELYFPTPKLIEWENGVRQYSTVRGDTEVLMSYVPPHTNVEPHQHKEVQIGMVVSGELM MTVGDVTRKMTALESAYIAPPHVPHGARNDTDQEVIAIDIKRLKADETYTSPEDYFLDIFKTRDLLPGM EVTFFVEDWVEIMLAKIPGNGGEMPFHKHRNEQIGICIGGGYDMTVEGCTVEMKFGTAYFCEPREDH GAINRSEKESKSINIFFPRYNRAKAKKMKADE

>DM\_validata495

GHMAQSETVERILDAAEQLFAEKGFAETSLRLITSKAGVNLAAVNYHFGSKKALIQAVFSRFLGPFCAS LEKELDRRQAKPEAQHATLEDLLHLLVSQAMAVKPRSGNDLSIFMRLLGLAFSQSQGHLRKYLEEVYG KVFRRYMLLVNEAAPKLPPIELFWRVHFMLGAAAFSMSGIKALRAMAETDFGVNTSTEQVMHLMVP FFAAGMRAESGIDDPLLAGAQLRPRNKTPAKA

>DM\_validata496

DHTLRYPVKPEEMDWSELYPEFFAPLTQNQSHDDPKDKKEKRAQAQVEFADIGCGYGGLLVELSPLF PDTLILGLEIRVKVSDYVQDRIRALRAAPAGGFQNIACLRSNAMKHLPNFFYKGQLTKMFFLFPDPHFK RTKHKWRIISPTLLAEYAYVLRVGGLVYTITDVLELHDWMCTHFEEHPLFERVPLEDLSEDPVVGHLGT STEEGKKVLRNGGKNFPAIFRRIODPVLO

>DM\_validata497

MPDKPTKEKLMEQLKGGIIVSCQALPGEPLYSETGGIMPLMAKAAQEAGAVGIRANSVRDIKEIQAITD LPIIGIIKKDYPPQEPFITATMTEVDQLAALNIAVIAMDCTKRDRHDGLDIASFIRQVKEKYPNQLLMADI STFDEGLVAHQAGIDFVGTTLSGYTPYSRQEAGPDVALIEALCKAGIAVIAEGKIHSPEEAKKINDLGVA GIVVGGAITRPKEIAERFIEALKS

>DM validata498

DYKDDDDKQSFSSSSSCTEEENKHHMGIDVIIKVTKQDQTPTNDKICQSVTEVTESEDESEEVVKGDP TTYYTVVGGGLTMDFGFTKCPKISSISEYSDGNTVNARLSSVSPGQGKDSPAITREEALSMIKDCEMSI NIKCSEEEKDSNIKTHPVLGSNISHKKVSYEDIIGSTIVDTKCVKNLEISVRIGDMCKESSELEVKDGFKYV DGSASEDAADDTSLINSAKLIACV

#### >DM validata499

MPSTDSIPKSNFDAIPDVIQAFKNGEFVVVLDDPSRENEADLIIAAESVTTEQMAFMVRHSSGLICAPL TPERTTALDLPQMVTHNADPRGTAYTVSVDAEHPSTTTGISAHDRALACRMLAAPDAQPSHFRRPG HVFPLRAVAGGVRARRGHTEAGVELCRLAGKRPVAVISEIVDDGQEVEGRAVRAAPGMLRGDECVA FARRWGLKVCTIEDMIAHVEKTEGKLETNGSG

#### >DM validata500

GKNVMVEPHRHEGVFICRGKEDALVTKNLVPGESVYGEKRVSISEGDDKIEYRAWNPFRSKLAAAILG GVDQIHIKPGAKVLYLGAASGTTVSHVSDIVGPDGLVYAVEFSHRSGRDLINLAKKRTNIIPVIEDARHP HKYRMLIAMVDVIFADVAQPDQTRIVALNAHTFLRNGGHFVISIKANCIDSTASAEAVFASEVKKMQ OENMKPOEQLTLEPYERDHAVVVGVYRP

# >DM validata501

MTKNPRNNKPKKILDSSYKSKTIWQNYIDALFETFPQLEISEVWAKWDGGNVTKDGGDAKLTANIRT GEHFLKAREAHIVDPNSDIYNTILYPKTGADLPCFGMDLMKFSDKKVIIVFDFQHPREKYLFSVDGLPED DGKYRFFEMGNHFSKNIFVRYCKPDEVDQYLDTFKLYLTKYKEMIDNNKPVGEDTTVYSDFDTYMTEL DPVRGYMKNKFGEGRSEAFVNDFLFSYK

#### >DM\_validata502

MADPSLNNPVVIQATRLDASILPRNVFSKSYLLYVIAQGTDVGAIAGKANEAGQGAYDAQVKNDEQ DVELADHEARIKQLRIDVDDHESRITANTKAITALNVRVTTAEGEIASLQTNVSALDGRVTTAENNISAL QADYVSKTATTSQSLASPLNVTTSYSVGGKKVVGARQTGWTAATGTANKGVFDADLTFAVSDTYTQ SEIOAIANALITERRRTKAMEDALRAHGLID

### >DM\_validata503

TTLSCKVTSVEAITDTVYRVRIVPDAAFSFRAGQYLMVVMDERDKRPFSMASTPDEKGFIELHIGASEIN LYAKAVMDRILKDHQIVVDIPHGEAWLRDDEERPMILIAGGTGFSYARSILLTALARNPNRDITIYWGG REEQHLYDLCELEALSLKHPGLQVVPVVEQPEAGWRGRTGTVLTAVLQDHGTLAEHDIYIAGRFEMA KIARDLFCSERNAREDRLFGDAFAFI

### >DM\_validata504

QVKPFSFVRDTDPVQLVNFLQSEHPQTIAVVLSYLDPPVAAQILGALPEELQTEVLKRIALLERTSPEVV KEIERNLEKKISGFVSRTFSKVGGIDTAAEIMNNLDRTTEKKIMDKLVQENPELADEIRRRMFVFEDILKL DDRSIQLVLREVDTRDLALALKGASDELKEKIFKNMSKRAAALLKDELEYMGPVRLKDVEEAQQKIINII RRLEEAGEIVIARGGGEELIM

### >DM\_validata505

MGSDKIHHHHHHHMEKTVIYLLEDGYVDFVVEKIRTKMEKLLEEKDKIFVVLAGGRTPLPVYEKLAEQKF PWNRIHFFLSDERYVPLDSDQSNFRNINEVLFSRAKIPSGNVHYVDTSLPIEKACEKYEREIRSATDQFD LAILGMGPDGHVASIFDLETGNKDNLVTFTDPSGDPKVPRVTLTFRALNTSLYVLFLIRGKEKINRLTEIL KDTPLPAYFVRGKEKTVWFVGK

#### >DM validata506

GAMAGSIRSKLSAIDVRQLGTVDYRTAWQLQRELADARVAGGADTLLLLEHPAVYTAGRRTETHERPI DGTPVVDTDRGGKITWHGPGQLVGYPIIGLAEPLDVVNYVRRLEESLIQVCADLGLHAGRVDGRSGV WLPGRPARKVAAIGVRVSRATTLHGFALNCDCDLAAFTAIVPCGISDAAVTSLSAELGRTVTVDEVRA TVAAAVCAALDGVLPVGDRVPSHAVPSPL

# >DM validata507

SNAMKILVTSGGTSEAIDSVRSITNHSTGHLGKIITETLLSAGYEVCLITTKRALKPEPHPNLSIREITNTKD LLIEMQERVQDYQVLIHSMAVSDYTPVYMTGLEEVQASSNLKEFLSKQNHQAKISSTDEVQVLFLKKT PKIISLVKEWNPTIHLIGFKLLVDVTEDHLVDIARKSLIKNQADLIIANDLTQISADQHRAIFVEKNQLQT VQTKEEIAELLLEKIQAYHS

>DM validata508

LALVATGNDTTTKPDLYYLKNSEAINSLALLPPPPAVGSIAFLNDQAMYEQGRLLRNTERGKLAAEDA NLSSGDVANAFSGAFGSPITEKDAPALHKLLTNMIEDAGDLATRSAKDHYMRIRPFAFYGVSTCNTTE QDKLSKNGSYPSGHTSTGWATALVLAEINPQRQNEILKRGYELGQSRVICGYHWQSDVDAARVVGS AVVATLHTNPAFQQQLQKAKAEFAQHQKK

>DM validata509

MDVNLYGPGGPHTALKDIANKYSEKTGVKVNVNFGPQATWFEKAKKDADILFGASDQSALAIASDF GKDFNVSKIKPLYFREAIILTQKGNPLKIKGLKDLANKKVRIVVPEGAGKSNTSGTGVWEDMIGRTQDIK TIQNFRNNIVAFVPNSGSARKLFAQDQADAWITWIDWSKSNPDIGTAVAIEKDLVVYRTFNVIAKEGA SKETQDFIAYLSSKEAKEIFKKYGWRE

>DM\_validata510

GMNSPKNSLYEEKSGHYYNAVNPNLLKHIKKEWKEVLDIGCSSGALGAAIKENGTRVSGIEAFPEAAE QAKEKLDHVVLGDIETMDMPYEEEQFDCVIFGDVLEHLFDPWAVIEKVKPYIKQNGVILASIPNVSHIS VLAPLLAGNWTYTEYGLLDKTHIRFFTFNEMLRMFLKAGYSISKVDRVYVDHKMYEPLIEELYGICKKYR LGSGFMAETVVFQYIIEAEKSQL

>DM\_validata512

MTNIEILENMLKLQQKLNDETNGLNWENGYTKEGKLISWRRCIYMECAELIDSFTWKHWKNISSLTN WENVRIEIVDIWHFILSLLLEEYRDKNNKDFKAIATEVNAVSVFQDFCKEEEYPNEGDIYGILNDIELIIHK CSGFGFNLGELLSTYFTLAIKCGLNLEILYKTYIGKNVLNIFRQNNGYKDGSYKKTWNGKEDNEVLAQIL EQELDFDTIYKKLEECYKKA

>DM\_validata513

MPAAAPGKNFDLSHWKLQLPDANTTEISSANLGLGYTSQYFYTDTDGAMTFWAPTTGGTTANSSYP RSELREMLDPSNSKVNWGWQGTHTMKLSGKTVQLPSSGKIIVAQIHGIMDDGTNAPPLVKAVFQD GQLDMQVKQNSDGTGSDVHNYFTGIKLGDLYNMEIRVTDGVAYVTMNGDTRSVDFVGKDAGWK NLKYYFKAGNYVQDNTSTGGSAIAKLYSLSVSHSN

>DM\_validata514

MGSSGSPVRASIEPLTWENAFFGVNSAIVRITSEAPLLTPDALAPWSRVQAKIAASNTGELDALQQLG FSLVEGEVDLALPVNNVSDSGAVVAQETDIPALRQLASAAFAQSRFRAPWYAPDASGRFYAQWIEN AVRGTFDHQCLILRAASGDIRGYVSLRELNATDARIGLLAGRGAGAELMQTALNWAYARGKTTLRVA TOMGNTAALKRYIOSGANVESTAYWLYR

>DM validata515

GSSGSSGMCGRFAQSQTREDYLALLAEDIERDIPYDPEPIGRYNVAPGTKVLLLSERDEHLHLDPVFW GYAPGWWDKPPLINARVETAATSRMFKPLWQHGRAICFADGWFEWKKEGDKKQPFFIYRADGQPIF MAAIGSTPFERGDEAEGFLIVTAAADQGLVDIHDRRPLVLSPEAAREWMRQEISGKEASEIAASGCVP ANQFSWHPVSRAVGNVKNQGAELIQPV

>DM validata516

RQNWEEADSMKSSVESLQNRVTELESVDKSAGQVARNTGLLESQLSRHDQMLSVHDIRLADMDLR FQVLETASYNGVLIWKIRDYKRRKQEAVMGKTLSLYSQPFYTGYFGYKMCARVYLNGDGMGKGTHLS LFFVIMRGEYDALLPWPFKQKVTLMLMDQGSSRRHLGDAFKPDPNSSSFKKPTGEMNIASGCPVFVA QTVLENGTYIKDDTIFIKVIVDTSDLPDP

>DM\_validata518

DYKDDDDKLHSQANLMRLKSDLFNRSPMYPGPTKDDPLTVTLGFTLQDIVKADSSTNEVDLVYYEQ QRWKLNSLMWDPNEYGNITDFRTSAADIWTPDITAYSSTRPVQVLSPQIAVVTHDGSVMFIPAQRLS FMCDPTGVDSEEGATCAVKFGSWVYSGFEIDLKTDTDQVDLSSYYASSKYEILSATQTRQVQHYSCC PEPYIDVNLVVKFRERRAGNGFFRNLFD

>DM\_validata519

MIERGKFRSLTLINWNGFFARTFDLDELVTTLSGGNGAGKSTTMAAFVTALIPDLTLLHFRNTTEAGAT SGSRDKGLHGKLKAGVCYSMLDTINSRHQRVVVGVRLQQVAGRDRKVDIKPFAIQGLPMSVQPTQL VTETLNERQARVLPLNELKDKLEAMEGVQFKQFNSITDYHSLMFDLGIIARRLRSASDRSKFYRLIEASL YGGISSAITRSLRDYLLPENSG

>DM\_validata520

MCSHYQALKDQERMRKYFAAHPSAEVPADMWPRYMGAFIRRPLEWDSGDEAVPEREAATGRWG MIPPGTRPEKLAEASKKNTSNARSETAHQLWTFRNAWAKAQHCIIPADAIYEPDWRSGKAVPTRFTR ADGAPLGIAGLWDRYRNAAGEWIDSYTMLTINADDDPLFRDYHQAGKEKRMVVILPDGAYGDWLT APATDTRDFLLPYPADRLVAAAVKLEHHHHHH

>DM\_validata521

MTAIAPVITIDGPSGAGKGTLCKAMAEALQWHLLDSGAIYRVLALAALHHHVDVASEDALVPLASHL DVRFVSTNGNLEVILEGEDVSGEIRTQEVANAASQVAAFPRVREALLRRQRAFRELPGLIADGRDMGT VVFPDAPVKIFLDASSEERAHRRMLQLQEKGFSVNFERLLAEIKERDDRDRNMAVAPLVPAADALVLD STTLSIEQVIEKALQYARQKLALA

>DM validata522

GMPVNSILGVFAKSPIKPLQEHMDKVYDCASLLVPFFEATITGNWDDAVQIRKQISLAEKQGDSLKREI RLTLPSGLFMPVERTDLLELLTQQDKIANKAKDISGRVIGRQLLIPQALQVPFIAYLQRCIDAVGLAQQV INELDDLLEAGFRGREVDFVAKMINELDIIEEDTDDLQIQLRRQLFALESELNPVDVMFLYKTIEWVGGL ADLAERVGSRLELMLARV

>DM\_validata523

GSHMLTKQQIRYCLDEMAKMFPDAHCELVHRNPFELLIAVVLSAQCTDALVNKVTKRLFEKYRTPHD YIAVPLEELEQDIRSIGLYRNKARNIQKLCAMLIDKYNGEVPRDRDELMKLPGVGRKTANVVVSVAFGV PAIAVDTHVERVSKRLGFCRWDDSVLEVEKTLMKIIPKEEWSITHHRMIFFGRYHCKAQSPQCPSCPLL HLCREGKKRMRKREEKAANOK

>DM\_validata524

QQKILENIRGIGTNTMTIFNGNGFGDRRSRHIQNLKISDANTLSKQSYIQSVTPNTSSSGILVVGNKSFT SANLYGIGEQYFDVEGLKLKQGRLLTEDDVDQSNQVVVLDESAKKAIFANENPLGKTVIFNKRPFRVIG VVSDQQLGGFPGNSLNLYSPYSTVLNKITGGSRIGSITVKISDDVNSTVAEKSLTELLKSLHGKKDFFIM NSDTIKQTIENTTGTMK

>DM\_validata525

MQLLSGIVQQQNNLLRAIEAQQHLLQLTVWGIKQLQARILAGGSGGHTTWMEWDREINNYTSLIHS LIEESQNQQEKNEQELLEGSSGGQLLSGIVQQQNNLLRAIEAQQHLLQLTVWGIKQLQARILAGGSG GHTTWMEWDREINNYTSLIHSLIEESQNQQEKNEQELLEGSSGGQLLSGIVQQQNNLLRAIEAQQHL LOLTVWGIKOLOARILAGGHHHHHHG

>DM\_validata527

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MTEIYTSVLSYRLLEGKAYSDADTRSLDRMMRSIDEFFSANPGYINFHIYRSYRTDSDVIFWYSSRNPDL MILAKERVQASMRPIAVSSFSSISIYDESPYNAMNKKLEDSLRLPPLRYFVAYPMSKTPDWYLLDFDTR KEIMHEHIKMALNHPDEKGIRSYTTYSFGIGDQEFVVLYEIPDIAAWSRVTEKLREARARKWIIKETPILLG RLVDAGDIAGFLL

MSKEKRMPFFKKTEHTPPYDVVPSMRPVVLVGPSLKGYEVTDMMQKALFDFLKHRFEGRISITRVTAD ISLAKRSVLNNPSKHAIIERSNTRSSLAEVQSEIERIFELARTLQLVVLDADTINHPAQLSKTSLAPIIVYVKI SSPKVLQRLIKSRGKSQAKHLNVQMVAADKLAQCPPQESFDVILDENQLEDACEHLADYLEAYWKA THPPSSNLPNPLLSRT

GSSCGNDESDPDSTVTIAMATVEKQPQYDAPYLVLDNGEKLWVVQHIVPYRDLKAGERIFGNYSFLE AGESGFAYNIRLNDYTLVPVQKIIGLNPDNMDSIGNMKVQIKDMWPSDDYLNVRFMLNFPSPQKPIL NLVVNEMIPWTKDGYAHLELRYNNNGSQGRLVPGMVSFKLDDYSPENSELKGIKVLVNPVDGEEKT YIFSYPLTGEDVPGFNPLDLAELK

MSLSYTTQQIIEKLRELKIVPVIALDNADDILPLADTLAKNGLSVAEITFRSEAAADAIRLLRANRPDFLIA AGTVLTAEQVVLAKSSGADFVVTPGLNPKIVKLCQDLNFPITPGVNNPMAIEIALEMGISAVKFFPAEA SGGVKMIKALLGPYAQLQIMPTGGIGLHNIRDYLAIPNIVACGGSWFVEKKLIQSNNWDEIGRLVREVI DIIKEGGSHHHHHH

GFGELKEEWRGEVVHLSWSPRAFLLKNFLSDEECDYIVEKARPKMVKSSVVDNESGKSVDSEIRTSTGT WFAKGEDSVISKIEKRVAQVTMIPLENHEGLQVLHYHDGQKYEPHYDYFHDPVNAGPEHGGQRVVT MLMYLTTVEEGGETVLPNAEQKVTGDGWSECAKRGLAVKPIKGDALMFYSLKPDGSNDPASLHGSC PTLKGDKWSATKWIHVAPIGGRH

ATETSFIIDAFNKTNLILQGDATVSSNGNLQLSYNSYDSMSRAFYSAPIQIRDSTTGNVASFDTNFTMN IRTHRQANSAVGLDFVLVPVQPESKGDTVTVEFDTFLSRISIDVNNNDIKSVPWDVHDYDGQNAEVR ITYNSSTKVFSVSLSNPSTGKSNNVSTTVELEKEVYDWVSVGFSATSGAYQWSYETHDVLSWSFSSKFI NLKDQKSERSNIVLNKIL

GHMLRGLRIIAENKIGVLRDLTTIIAEEGGNITFAQTFLIKHGEHEGKALIYFEIEGGDFEKILERVKTFDYIIE IEEEESFERVFGKRVIILGGGALVSQVAIGAISEADRHNLRGERISVDTMPVVGEEEIAEAVKAVSRLHRA EVLVLAGGIMGGKITEEVKKLRKSGIRVISLSMFGSVPDVADVVISDPVMAGTLAVMHISEKAKFDLDR VKGRRIGK

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TNAKASKRVYITFTGYDKKPSIDNLKKLDMSITSNPSKCTHLIAPRILRTSKFLCSIPYGPCVVTMDWINS CLKTHEIVDEEPYLLNDPEKELELGCTLESALKRARAQGPSLLEDYVVYLTSKTVAPENVPAVISIVKSNG

GVCSTLNVYNKRLARHLEDGNVVLITCNEDSHIWTNFLDNASQNKTIFLQNYDWLIKTVLRQEIDVN DRIADEFARAV

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MEKKITGYTTVDISQWHRKEHFEAFQSVAQCTYNQTVQLDITAFLKTVKKNKHKFYPAFIHILARLMN AHPEFRMAMKDGELVIWDSVHPCYTVFHEQTETFSSLWSEYHDDFRQFLHIYSQDVACYGENLAYFP KGFIENMFFVSANPWVSFTSFDLNVANMDNFFAPVFTMGKYYTQGDKVLMPLAIQVHHAVCDGFH VGRMLNELQOYCDEWQGGA

SGTTNTVAAYNLTWKSTNFKTILEWEPKPVNQVYTVQISTKSGDWKSKCFYTTDTECDLTDEIVKDVK QTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLGQPTIQSFEQVGTKVNVTVEDERTLVRRN NTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGENYCFSVQAVIPSRTVNRKSTDSPV ECMGQEKGEFRE

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MSLLNNKAGVISRLADFLGFRPKTGDIDVMNRQSVGSVTISQLAKGFYEPNIESAINDVHNFSIKDVGT IITNKTGVSPEGVSQTDYWAFSGTVTDDSLPPGSPITVLVFGLPVSATTGMTAIEFVAKVRVALQEAIAS FTAINSYKDHPTDGSKLEVTYLDNQKHVLSTYSTYGITISQEIISESKPGYGTWNLLGAQTVTLDNQQT PTVFYHFFRTA

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MAGRRRWSTEQILDAAAELLLAGDAETFSVRKLAASLGTDSSSLYRHFRNKTELLRAVADRILLSAMD GYRPEGDWKQRLTAVALRLRESFGQQPQLAAVWGRHGSGGTGSRLMMEEVLQALRASGLPDDEIP ARYHRLVILISSLITAEGGFGAVGAQEHEQGMEQFRVAVLGADPERFPALSHFAREIRPLGADRGAAFE EILAAHLAHLEAAAPGS

VLDSFEILKALKSLDLLKNAPAWWWPNALKFEALLGAVLTQNTKFEAVLKSLENLKNAFILENDDEINL KKIAYIEFSKLAECVRPSGFYNQKAKRLIDLSGNILKDFQSFENFKQEVTREWLLDQKGIGKESADAILCY ACAKEVMVVDKYSYLFLKKLGIEIEDYDELQHFFEKGVQENLNSALALYENTISLAQLYARFHGKIVEFS KOKLELKL

MSRHWPLFDLRITTPRLQLQLPTEELCDQLIDTILEGVHDPDRMPFSVPWTRASREDLPFNTLSHLWQ QLAGFKRDDWSLPLAVLVDGRAVGVQALSSKDFPITRQVDSGSWLGLRYQGHGYGTEMRAAVLYF AFAELEAQVATSRSFVDNPASIAVSRRNGYRDNGLDRVAREGAMAEALLFRLTRDDWQRHRTVEVR VDGFDRCRPLFGPLEPPRY

>DM\_validata550

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MADAGEGEDEIQFLRTDDEVVLQCTATIHKEQQKLCLAAEGFGNRLCFLESTSNSKNVPPDLSICTFVL EQSLSVRALQEMLANTVEKSEGQVDVEKWKFMMKTAQGGGHRTLLYGHAILLRHSYSGMYLCCLST

SRSSTDKLAFDVGLQEDTTGEACWWTIHPASKQRSEGEKVRVGDDLILVSMSSERYLHLSYGNSSWH VDAAFQQTLWSVAPI

LNTSGSGTILIDLSPDDKEFQSVEEEMQSTVREHRDGGHAGGIFNRYNILKIQKVCNKKLWERYTHRRK EVSEENHNHANERMLFHGSPFVNAIIHKGFDERHAYIGGMFGAGIYFAENSSKSNQYVYGIGGGTGC PVHKDRSCYICHRQLLFCRVTLGKSFLQFSAMKMAHSPPGHHSVTGRPSVNGLALAEYVIYRGEQAY PEYLITYQIMRPEG

>DM\_validata553

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>DM validata554

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>DM validata555

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>DM validata556

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>DM validata557

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>DM\_validata558

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>DM\_validata559

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>DM\_validata560

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>DM\_validata561

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>DM validata562

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>DM\_validata563

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>DM validata564

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>DM validata565

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>DM\_validata567

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>DM\_validata568

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>DM validata569

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>DM\_validata570

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>DM\_validata571

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>DM\_validata572

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>DM\_validata573

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>DM validata574

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MAVSLVLPQEAADVRQSFCCHVHFFASVPTAEDWASKHQGLEGLAIVSVHEAFGLGQEFNRHLLQT MSSRTP

>DM validata575

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>DM validata576

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>DM validata577

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>DM\_validata578

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>DM\_validata579

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>DM validata580

ILQTTVDGNSTAISNLKSDISSNGLAITDLQDRVKSLESTASHGLSFSPPLSVADGVVSLDMDPYFCSQ RVSLTSYSAEAQLMQFRWMARGTNGSSDTIDMTVNAHCHGRRTDYMMSSTGNLTVTSNVVLLTFD LSDITHIPSDLARLVPSAGFQAASFPVDVSFTRDSATHAYQAYGVYSSSRVFTITFPTGGDGTANIRSLT VRTGIDT

>DM\_validata581

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>DM\_validata582

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>DM\_validata583

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>DM\_validata584

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>DM validata585

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>DM validata586

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>DM validata587

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>DM validata588

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>DM validata589

>DM validata590

>DM validata591

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>DM\_validata592

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>DM validata594

>DM validata595

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>DM\_validata596

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>DM\_validata597

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>DM\_validata598

>DM\_validata599

>DM validata600

MGSSEQELKAIVKDLGCGPYFLGTYDKRFPGFVSPHKLACAIVNTAGRETGGVHWMAFAWNPRSKT CYLFEPFGFSDQRLKQVYQFEYESLLRRSAIASSPDRCITLEKSTQSVQGPNSAACGLFCCMFLHAFAN WPQTPMDHNPTMNLITGVPNSMLNSPQVQPTLRRNQEQLYSFLERHSPYFRSHSAQIRSATSFCHL KNM

>DM\_validata601

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>DM validata602

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>DM\_validata604

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>DM validata605

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>DM validata606

>DM\_validata607

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>DM\_validata608

>DM\_validata609

>DM\_validata610

MKELSKSDRTRQFIIESTAPVFNVKGLAGTSLTDLTEATNLTKGSIYGNFENKEAVAIAAFDYNWGHVK SVLTAKVQACNTYKEMLLVYSSMYNDADGSLFPVGGCPLLNTTIEADDTHDALRKKAGEAILSWKKN LVTIIKKGIQAKEFRPDTDVTKIAFSMIALVEGAILIHRATKNRAYSDYVFESLEDLIAGIEVKKK

>DM\_validata611

GSHMSNAKTKLGITKYSIVTNSNDSVTLRLMTEHDLAMLYEWLNRSHIVEWWGGEEARPTLADVQE QYLPSVLAQESVTPYIAMLNGEPIGYAQSYVALGSGDGWWEEETDPGVRGIDQLLANASQLGKGLG TKLVRALVELLFNDPEVTKIQTDPSPSNLRAIRCYEKAGFERQGTVTTPDGPAVYMVQTRQAFERTRS DA

>DM validata612

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>DM validata614

>DM validata615

>DM\_validata616

>DM\_validata617

MERTELLKPRTLADLIRILHELFAGDEVNVEEVQAVLEAYESNPAEWALYAKFDQYRYTRNLVDQGNG KFNLMILCWGEGHGSSIHDHTDSHCFLKLLQGNLKETLFDWPDKKSNEMIKKSERTLRENQCAYINDS IGLHRVENVSHTEPAVSLHLYSPPFDTCHAFDQRTGHKNKVTMTFHSKFGIRTPFTTSGSLENN

>DM validata618

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>DM validata619

>DM\_validata620

>DM\_validata621

>DM validata622

>DM validata623

>DM\_validata624

>DM\_validata625

>DM validata626

>DM\_validata627

>DM\_validata629

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### >DM\_validata631

### >DM\_validata632

### >DM\_validata633

#### >DM validata634

#### >DM\_validata635

#### >DM\_validata637

#### >DM validata638

LAQYPVIGIDDDEFATAKKLITKQEVRAVTLSKLRLQDDLVMWDIGAGSASVSIEASNLMPNGRIFALE

 $RNPQYLGFIRDNLKKFVARNVTLVEAFAPEGLDDLPDPDRVFIGGSGGMLEEIIDAVDRRLKSEGVIVL\\NAVTLDTLTKAVEFLEDHGYMVEVACVNVAKTKGLTEYKMFESHNPVYIITAWKSDE$ 

>DM validata639

>DM\_validata640

>DM validata641

>DM validata642

>DM\_validata643

>DM\_validata644

MPRPKLKSDDEVLEAATVVLKRCGPIEFTLSGVAKEVGLSRAALIQRFTNRDTLLVRMMERGVEQVRH YLNAIPIGAGPQGLWEFLQVLVRSMNTRNDFSVNYLISWYELQVPELRTLAIQRNRAVVEGIRKRLPP GAPAAAELLLHSVIAGATMQWAVDPDGELADHVLAQIAAILCLMFPEHDDFQLLQAHA

>DM\_validata645

>DM validata646

>DM validata647

ILESLVTTLDEQGRINLAPLGPIVLPPQSPGGLPQFLLRPYEGSTTCDNLLASGNAVIHVIDDALLIAKTAI GKVDASDLVVPIPGLEDTHVRLKRCHRWFAVRVTQRAGTPPRHELTARCLASGLVDPFFGFNRAKHA VIEAAVAATRLHLLPPEEIEEELERARIAIEKTGGEPEREALQLIRRHVRESSIS

>DM\_validata648

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>DM\_validata649

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>DM\_validata650

>DM validata651

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>DM validata652

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>DM validata653

AMKPRIYVKVKPERLGAVIGPRGEVKAEIMRRTGTVITVDTENSMVIVEPEAEGIPPVNLMKAAEVVKAI SLGFPPEKAFRLLEEDQILVVVDLKQVVGDSQNHLKRIKGRIIGEGGRARRTIEEMTDTYINVGEYEVAII GDYERAMAAKQAIEMLAEGRMHSTVYRHLERIMREIKRRERLKMWAREEL

>DM\_validata654

>DM validata655

>DM validata656

>DM validata657

#### >DM validata658

#### >DM validata659

## >DM validata660

MKGMKYHDYIWDLGGTLLDNYETSTAAFVETLALYGITQDHDSVYQALKVSTPFAIETFAPNLENFLE KYKENEARELEHPILFEGVSDLLEDISNQGGRHFLVSHRNDQVLEILEKTSIAAYFTEVVTSSSGFKRKPN PESMLYLREKYQISSGLVIGDRPIDIEAGQAAGLDTHLFTSIVNLRQVLDI

#### >DM validata661

## >DM\_validata662

# >DM validata663

GMSYQNANYSAFYVSEPFSESNLGANSTHDFVYYNMLRMWKGEDNSFPFNDAHDKTYNVRDGSD WEKTLKPRLHTRLDNSKNIILFLSSITANSRALREEMNYGIGTKGLPVIVIYPDYDKKSDIVDSNGNFKKQ IKDLWDKLPAFRDNMSSVATLHIPCTKSVIISALNNEDFMVNTMADAEKYYYKP

>DM validata664

>DM validata666

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>DM\_validata667

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>DM\_validata669

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>DM validata670

MRGSHHHHHHRSPSKVQELSVYEINELDRHSPKILKNAFSLMFGLGDLVPFTNKLYTGDLKKRVGITA GLCVVIEHVPEKKGERFEATYSFYFGDYGHLSVQGPYLTYEDSFLAITGGAGIFEGAYGQVKLQQLVYP TKLFYTFYLKGLANDLPLELTGTPVPPSKDIEPAPEAKALEPSGVISNYTN

>DM validata671

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>DM\_validata672

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>DM\_validata674

DESDNAFIRASRALTDKVTDLLGGLFSKTEMSEVLTEILRVDPAFDKDRFLKQCENDIIPNVLEAMISGE LDILKDWCYEATYSQLAHPIQQAKALGLQFHSRILDIDNVDLAMGKMVEQGPVLIITFQAQLVMVVR NPKGEVVEGDPDKVLRMLYVWALCRDQDELNPYAAWRLLDISASSTEQIL

>DM validata676

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>DM\_validata677

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>DM\_validata678

MTKQYLTHRCLIAPPEMADDFFANTVIYLARHDEEGAQGIIINRPAGIQIKELLNDLDIDADNVNPHEV LQGGPLRPEAGFVLHTGQPTWHSSIAVGENVCITTSKDILDAIAHNEGVGRYQIALGYASWGKNQLE DEIARGDWLICDADMDLIFNLPYDDRWDAAYKKIGVDRTWLASEIGHALE

>DM validata679

MPEITESERAYHLRKMKTRMQRVDVTGDGFISREDYELIAVRIAKIAKLSAEKAEETRQEFLRVADQLGL APGVRISVEEAAVNATDSLLKMKGEEKAMAVIQSLIMYDCIDTDKDGYVSLPEFKAFLQAVGPDLTDD KAITCFNTLDFNKNGQISRDEFLVTVNDFLFGLEETALANAFYGDLVD

## >DM\_validata680

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>DM\_validata681

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>DM\_validata682

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>DM validata684

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>DM\_validata685

GAAASIQTTVNTLSERISSKLEQEANASAQTKCDIEIGNFYIRQNHGCNLTVKNMCSADADAQLDAV LSAATETYSGLTPEQKAYVPAMFTAALNIQTSVNTVVRDFENYVKQTCNSSAVVDNKLKIQNVIIDEC YGAPGSPTNLEFINTGSSKGNCAIKALMQLTTKATTQIAPKQVAGTGVQ

>DM\_validata686

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>DM validata687

EIPLCANLVPVPITNATLDQITGKWFYIASAFRNEEYNKSVQEIQATFFYFTPNKTEDTIFLREYQTRQD

QCIYNTTYLNVQRENGTISRYVGGQEHFAHLLILRDTKTYMLAFDVNDEKNWGLSVYADKPETTKEQ LGEFYEALDCLRIPKSDVVYTDWKKDKCEPLEKQHEKERKQEEGES

>DM validata688

SDSTAGTDAVAVGGTFQFHSPDGKMEIFYDEADRQQLPDIGGDSLMEEGTQINLSDFENQVVILNA WGQWCAPCRSESDDLQIIHEELQAAGNGDTPGGTVLGINVRDYSRDIAQDFVTDNGLDYPSIYDPP FMTAASLGGVPASVIPTTIVLDKOHRPAAVFLREVTSKDVLDVALPLVDEA

>DM\_validata689

MYEVELKGYANDEIFEKVRETFEFMRKEIHEDIYYQHPCRDFSKTDEALRIRIKRFNGHNEVFLTYKGPKI DEKSKTRLEIEVEIQEDVDKYFELLDRLGFKEVLKVVKTREKYYVEKGVTITLDEVEGLGKFIEIETLVKEKD EIPEAVEKLEKILRELGVEKFERRSYLELLLEKRTELNI

>DM\_validata690

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>DM validata692

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>DM\_validata694

APPSNLMQLPWRQGYSWQPNGAHSNTGSGYPYSSFDASYDWPRWGSATYSVVAAHAGTVRVLS RCQVRVTHPSGWATNYYHMDQIQVSNGQQVSADTKLGVYAGNINTALCEGGSSTGPHLHFSLLYN GAFVSLQGASFGPYRINVGTSNYDNDCRRYYFYNQSAGTTHCAFRPLYNPGLAL

>DM\_validata695

MSETAPLPSASSALEDKAASAPVVGIIMGSQSDWETMRHADALLTELEIPHETLIVSAHRTPDRLADYA RTAAERGLNVIIAGAGGAAHLPGMCAAWTRLPVLGVPVESRALKGMDSLLSIVQMPGGVPVGTLAIG ASGAKNAALLAASILALYNPALAARLETWRALQTASVPNSPITEDK

>DM\_validata696

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>DM validata697

MKKIILTIGCPGSGKSTWAREFIAKNPGFYNINRDDYRQSIMAHEERDEYKYTKKKEGIVTGMQFDTAK SILYGGDSVKGVIISDTNLNPERRLAWETFAKEYGWKVEHKVFDVPWTELVKRNSKRGTKAVPIDVLRS MYKSMREYLGLPVYNGTPGKPKAVIFDVDGTLAKMNGRGPYDL

>DM\_validata698

MMTMRGLLVGRMQPFHRGALQVIKSILEEVDELIICIGSAQLSHSIRDPFTAGERVMMLTKALSENGIP ASRYYIIPVQDIECNALWVGHIKMLTPPFDRVYSGNPLVQRLFSEDGYEVTAPPLFYRDRYSGTEVRRR MLDDGDWRSLLPESVVEVIDEINGVERIKHLAKKEVSELGGIS

>DM\_validata699

AEHNPVVMVHGIGGASFNFAGIKSYLVSQGWSRDKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVANVVTLGGANRLTTGKALPGTDPNQKILYTSIYSSA DMIVMNYLSRLDGARNVQIHGVGHIGLLYSSQVNSLIKEGLNGGGQNTN

>DM\_validata700

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>DM\_validata702

MILVTGGARSGKSRHAEALIGDAPQVLYIATSQILDDEMAARIQHHKDGRPAHWRTAECWRHLDTLI TADLAPDDAILLECITTMVTNLLFALGGENDPEQWDYAAMERAIDDEIQILIAACQRCPAKVVLVTNE VGMGIVPENRLARHFRDIAGRVNQRLAAAADEVWLVVSGIGVKIK

>DM validata703

MTEMELKLIKIDTSHYFEKKPGLGERVDYAGRCFYNKFQRVNAMLTSSLIQKHLKREIEIAHNLILRNDK VENIVFDYNGRNPERFYHKAQLLLREEGFMNFTAYNTKTPGHLHLYVHKGHTELGEGERLVKTLSMKL AQGLPKEWKVFPSNEWPKEFNILALPYEVFAKERGSSWAKHL

>DM validata704

SANENNLIWIDLEMTGLDPERDRIIEIATLVTDANLNILAEGPTIAVHQSDEQLALMDDWNVRTHTAS GLVERVKASTMGDREAELATLEFLKQWVPAGKSPICGNSIGQDRRFLFKYMPELEAYFHYRYLDVSTLK ELARRWKPEILDGFTKQGTHQAMDDIRESVAELAYYREHFIKL

>DM validata705

GMTRQRIAIDMDEVLADTLGAVVKAVNERADLNIKMESLNGKKLKHMIPEHEGLVMDILKEPGFFRN LDVMPHAQEVVKQLNEHYDIYIATAAMDVPTSFHDKYEWLLEYFPFLDPQHFVFCGRKNIILADYLID DNPKQLEIFEGKSIMFTASHNVYEHRFERVSGWRDVKNYFNSIEK

>DM validata706

MAGNREDRKAKVIEVLNKARAMELHAIHQYMNQHYSLDDMDYGELAANMKLIAIDEMRHAENFAE RIKELGGEPTTQKEGKVVTGQAVPVIYESDADQEDATIEAYSQFLKVCKEQGDIVTARLFERIIEEEQAH LTYYENIGSHIKNLGDTYLAKIAGTPSSTGTASKGFVTATPAAE

>DM\_validata707

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>DM validata708

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>DM validata709

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>DM\_validata710

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>DM\_validata711

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>DM validata712

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>DM validata713

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>DM\_validata714

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>DM\_validata715

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>DM validata716

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>DM validata717

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>DM\_validata718

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>DM validata719

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>DM validata720

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>DM validata721

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>DM\_validata722

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>DM\_validata723

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>DM validata724

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>DM\_validata725

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>DM\_validata726

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>DM\_validata727

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>DM\_validata728

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>DM\_validata729

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>DM\_validata730

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>DM validata731

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>DM\_validata732

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>DM\_validata733

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>DM validata734

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>DM validata735

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>DM\_validata736

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>DM\_validata737

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>DM validata738

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>DM\_validata739

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>DM\_validata740

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>DM\_validata741

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>DM validata742

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>DM\_validata743

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>DM\_validata744

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>DM\_validata745

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>DM\_validata746

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>DM validata747

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>DM validata748

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>DM validata749

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>DM validata750

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>DM\_validata751

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>DM validata752

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>DM validata753

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>DM validata754

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>DM\_validata755

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>DM validata756

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>DM validata757

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>DM\_validata758

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>DM\_validata759

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>DM validata760

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>DM validata761

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>DM\_validata762

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>DM validata763

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>DM validata764

DGTSQLAELVDAAAERLEVADPVAAFKWRAQLPIEDSGRVEQQLAKLGEDARSQHIDPDYVTRVFD DQIRATEAIEYSRFSDWKLNPASAPPEPPDLSASRSAIDSLNNRMLSQIWSHWSLLSAPSCAAQLDRA KRDIVRSRHLDSLYQRALTTATQSYCQALPPA

>DM\_validata765

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>DM\_validata766

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>DM\_validata768

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>DM validata771

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>DM\_validata772

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>DM\_validata774

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>DM\_validata775

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>DM\_validata776

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>DM\_validata777

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>DM\_validata778

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>DM validata779

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>DM\_validata780

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>DM\_validata781

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>DM validata782

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>DM\_validata783

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>DM\_validata785

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>DM\_validata786

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>DM validata787

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>DM\_validata788

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>DM\_validata789

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>DM\_validata790

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>DM validata791

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>DM\_validata792

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>DM\_validata793

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>DM\_validata794

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>DM\_validata795

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>DM validata796

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>DM validata798

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>DM validata799

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>DM\_validata800

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>DM\_validata801

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>DM validata802

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>DM validata803

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>DM validata804

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>DM\_validata805

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>DM validata806

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>DM validata807

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>DM\_validata808

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>DM\_validata809

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>DM\_validata810

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>DM validata812

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>DM\_validata813

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>DM\_validata814

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>DM validata815

GMSSSGIEIAKPFVTATTNVLSTMAGIQPIPGQPYVKKNNVAKGDVSAVVGITGHKNGSISVTFTKQC AIAVVKAMLGDDIQDIIQDTKDAVGEVTNMISGQARAALSEMGMTFQGATPSVIMGDGHTISHVTK SPVIAIPFKTNHGEFTVEFCLE

>DM\_validata816

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>DM\_validata817

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>DM\_validata818

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>DM validata819

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>DM\_validata820

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>DM\_validata821

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>DM\_validata822

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>DM\_validata823

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>DM\_validata824

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>DM\_validata825

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>DM validata826

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>DM\_validata827

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>DM\_validata828

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>DM validata829

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>DM\_validata830

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>DM\_validata832

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>DM\_validata833

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>DM\_validata834

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>DM\_validata835

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>DM\_validata836

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>DM\_validata837

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>DM validata838

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>DM\_validata839

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>DM\_validata840

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>DM\_validata841

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>DM\_validata842

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>DM validata843

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>DM\_validata844

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>DM validata845

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>DM\_validata846

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>DM\_validata847

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>DM validata848

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>DM validata849

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>DM validata850

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>DM\_validata853

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>DM validata854

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>DM validata855

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>DM\_validata856

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>DM\_validata857

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#### **KLLTSGVPLSLAEVEVFRES**

>DM validata858

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>DM\_validata859

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>DM\_validata860

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>DM\_validata861

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## TMLQLEQQIQAYDPKQQ

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>DM\_validata886

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## **PNNQKDTVCE**

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>DM\_validata902

>DM\_validata901

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>DM\_validata905

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>DM\_validata907

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>DM\_validata908

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>DM validata909

>DM\_validata910

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>DM\_validata911

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>DM validata912

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>DM\_validata913

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>DM\_validata915

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>DM\_validata916

>DM validata917

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>DM validata918

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>DM validata919

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>DM validata920

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>DM validata921

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>DM\_validata922

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>DM\_validata923

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>DM\_validata925

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>DM\_validata926

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>DM\_validata927

>DM validata928

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>DM validata929

>DM\_validata931

>DM validata932

>DM\_validata933

>DM validata934

## >DM\_validata935

>DM validata936

>DM validata937

>DM validata938

>DM validata939

>DM validata940

>DM\_validata941

>DM\_validata942

>DM\_validata943

>DM validata944

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>DM\_validata947

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>DM validata960

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>DM validata961

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>DM\_validata962

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>DM validata970

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>DM\_validata999

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>DM\_validata1000

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>DM\_validata1001

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>DM\_validata1002

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>DM validata1003

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>DM validata1004

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>DM\_validata1005

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>DM validata1006

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>DM\_validata1007

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>DM validata1008

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>DM validata1009

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>DM\_validata1010

>DM\_validata1011

>DM\_validata1012

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>DM\_validata1013

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>DM\_validata1014

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>DM validata1015

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>DM validata1016

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>DM\_validata1017

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>DM\_validata1018

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>DM\_validata1019

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>DM\_validata1020

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>DM\_validata1021

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>DM\_validata1022

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>DM\_validata1023

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>DM\_validata1025

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>DM validata1026

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>DM validata1027

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>DM validata1030

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>DM validata1031

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>DM validata1032

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>DM\_validata1033

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>DM\_validata1034

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>DM\_validata1035

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>DM validata1036

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>DM validata1037

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>DM validata1038

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>DM validata1039

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>DM validata1040

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>DM validata1041

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>DM\_validata1042

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>DM validata1043

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>DM\_validata1045

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>DM\_validata1047

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>DM\_validata1048

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>DM validata1049

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>DM\_validata1050

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>DM validata1051

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>DM validata1052

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>DM\_validata1053

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>DM\_validata1055

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>DM\_validata1057

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>DM\_validata1058

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>DM\_validata1059

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>DM\_validata1060

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