#### >DM validata1

MLGWVQRVLPQPPGTPQKTKQEEEGTEPEPELEPKPETAPEETELEEVSLPPEEPCVGKEVAAVTLGP QGTQETALTPPTSLQAQVSVAPEAHSSPRGWVLTWLRKGVEKVVPQPAHSSRPSQNIAAGLESPDQ QAGAQILGQCGTGGSDEPSEPSRAEDPGPGPWLLRWFEQNLEKMLPQPPKISEGWRDEPTDAALGP EPPGPALEIKPMLQAQESPSLPAPGPPEEEPIPEPQPTIQASSLPPPQDSARLMAWILHRLEMALPQ PVIRGKGGEQESDAPVTCDVQTISILPGEQEESHLILEEVDPHWEEDEHQEGSTSTSPRTSEAAPADEE KGEVVEQTPRELPRIQEEKEDEEEEKEDGEEEEEGREKEEEGEEKEEEGEKKEEEGGEKEEEGGEKEEEGGEKEEEGGEKEEEGGEKEEEGGEKEEEGGEKEEEGDHSVLLDSYLVPQSEE DQSEESETQDQSEVGGAQTQGEVGGAQALSEESETQDQSEVGGAQDQSEVGGAQAQGEVGGAQ EQDGVGGAQDQSTSHQELQEEALADSSGGSFQMSPFEALQECEALKR

## >DM\_validata2

## >DM validata3

MAEDADMRNELEEMQRRADQLADESLESTRRMLQLVEESKDAGIRTLVMLDEQGEQLDRVEEGMN HINQDMKEAEKNLKDLGKCCGLYICPCNKLKSSDAYKKAWGNNQDQVVASQPARVVDEREQMAIS GGFIRRVTNDARENEMDEDLEQVSGIIGNLRHMALDMGNEIDTQNRQIDRIMEKADSNKTRIDEAN ORATKMLGSG

# >DM\_validata4

MNAADRMGARVALLLLLVLGSPQSGVHGEEGLDFPEYDGVDRVINVNAKNYKNVFKKYEVLALLYH EPPEDDKASQRQFEMEELILELAAQVLEDKGVGFGLVDSEKDAAVAKKLGLTEEDSIYVFKEDEVIEYD GEFSADTLVEFLLDVLEDPVELIEGERELQAFENIEDEIKLIGYFKNKDSEHYKAFKEAAEEFHPYIPFFATF DSKVAKKLTLKLNEIDFYEAFMEEPVTIPDKPNSEEEIVNFVEEHRRSTLRKLKPESMYETWEDDMDGIH IVAFAEEADPDGYEFLEILKSVAQDNTDNPDLSIIWIDPDDFPLLVPYWEKTFDIDLSAPQIGVVNVTDA DSVWMEMDDEEDLPSAEELEDWLEDVLEGEINTEDDDDDDDDDD

1:	11	11	1	11	.1	11	L1	.1	1:	11	L1	.1	1	1:	11	L1	.1	.1	1	1:	11	L1	1	.1	.1	1	1:	1:	11	L1	L1	.1	1	1	1:	11	L1	1	.1	1:	11	.1	1	11	L1	.1	1:	11	11	.1	1	1:	11	1	1	11	.1	1:	11
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1:	11	11	1	11	.1	11	L1	1	1:	11	1	.1	1	1																																													

### >DM validata5

VLSEGEWQLVLHVWAKVEADVAGHGQDILIRLFKSHPETLEKFDRFKHLKTEAEMKASEDLKKHGVTV LTALGAILKKKGHHEAELKPLAQSHATKHKIPIKYLEFISEAIIHVLHSRHPGDFGADAQGAMNKALELF RKDIAAKYKELGYOG

## >DM\_validata6

## >DM\_validata7

MKKRNRLKKNEDFQKVFKHGTSVANRQFVLYTLDQPENDELRVGLSVSKKIGNAVMRNRIKRLIRQA FLEEKERLKEKDYIIIARKPASQLTYEETKKSLQHLFRKSSLYKKSSSK

## >DM\_validata8

MPRSLKKGPFIDLHLLKKVEKAVESGDKKPLRTWSRRSTIFPNMIGLTIAVHNGRQHVPVFVTDEMVG HKLGEFAPTRTYRGHAADKKAKKK

#### >DM\_validata11

VSFRQKRTRIPLLAMTVTALAAAVCGVTTAPAATGAEVAVPLSVGAAAGNATPIPGYVIQSSAQVSD DSAVSKPGFPTSGWYPVSSRSTVYAGLLQNGKYADPFYSTNMQNVPAAQFSVPWWYRTDLNVDD TSSRTYLDFSGVLSKADVWVNGTKVATKDQVNGAYTRHDLDITAQVHTGVNSVAFKVYPNDPNRD LSMGWIDWAQTPPDQNMGIVRDVLVRRSGAVALRSAHVIQKLNSALDHADLTVKADVRNDSANA VQTTVAGTVAGKPISQTVSLAAKERKTVTFPLVGLDRPNVWWPAGMGGQHRYDLDLTASVGGTPS DAAKSKFGVRDVKATLNSSGGRQYSVNGKPLLIRGGGYTPDLFLRWNETAAADKLKYVLNLGLNTVR LEGHIEPDEFFDIADDLGVLTMPGWECCDKWEGQVNGEEKGEPWVESDYPIAKASMFSEAERLRDH PSVISFHIGSDFAPDRRIEQGYLDAMKAADFLLPVIPAASARPSPITGASGMKMNGPYDYVPPVYWYD KSQKDRGGAWSFNSETSAGVDIPTMDTLKRMMSASELDTMWKNPSAKQYHRSSSDTFGNLKLFGD ALTKRYGASANLNDFVRKAQLSQYENVRAEFESHSRNYTDSTNPSTGLIYWMLNSPWTSLHWQLFD AYMDQNGAYYGAKKANEPLHIQYSHDNRSVVVINQTSNAVSGLTATTKLYNLDGTEKYSNTKTGLS VGALGAKATAVTVPAVSGLSTTYLAKNVLTDSSGKEVSRNVYWLSTKADTLNWGGSDWYYTPQSAF ADLSGLNNLGQSAVGATANSVAGADGTTTTTVTLKNTSGGRLPAFYVDSKVVDSAGKPVLPVEWN DNAVSLWPGETTTLTAKYRTADLKGSKPSVRISGWNTGTQTVPADGSGPGPSDPVDYQAEDATIVQ GAVESNHAGYTGTGFVNYDNVAGSSVEWTVTVPSAGTYDVVVRYANGTTTSRPLDFSVNGSISASG

#### VAFGSTGTWPAWTTKTVRVTLAAGVNKIKAVATTANGGPNVDKITL

#### >DM validata18

MLNRETHMKKVRKIFQKAVAGLCCISQLTAFSSIVALAETPETSPAIGKVVIKETGEGGALLGDAVFELK NNTDGTTVSQRTEAQTGEAIFSNIKPGTYTLTEAQPPVGYKPSTKQWTVEVEKNGRTTVQGEQVENR EEALSDQYPQTGTYPDVQTPYQIIKVDGSEKNGQHKALNPNPYERVIPEGTLSKRIYQVNNLDDNQY GIELTVSGKTVYEQKDKSVPLDVVILLDNSNSMSNIRNKNARRAERAGEATRSLIDKITSDSENRVALVT YASTIFDGTEFTVEKGVADKNGKRLNDSLFWNYDQTSFTTNTKDYSYLKLTNDKNDIVELKNKVPTEA EDHDGNRLMYQFGATFTQKALMKADEILTQQARQNSQKVIFHITDGVPTMSYPINFNHATFAPSYQ NQLNAFFSKSPNKDGILLSDFITQATSGEHTIVRGDGQSYQMFTDKTVYEKGAPAAFPVKPEKYSEMK AAGYAVIGDPINGGYIWLNWRESILAYPFNSNTAKITNHGDPTRWYYNGNIAPDGYDVFTVGIGING DPGTDEATATSFMQSISSKPENYTNVTDTTKILEQLNRYFHTIVTEKKSIENGTITDPMGELIDLQLGTD GRFDPADYTLTANDGSRLENGQAVGGPQNDGGLLKNAKVLYDTTEKRIRVTGLYLGTDEKVTLTYNV RLNDEFVSNKFYDTNGRTTLHPKEVEQNTVRDFPIPKIRDVRKYPEITISKEKKLGDIEFIKVNKNDKKPL RGAVFSLQKQHPDYPDIYGAIDQNGTYQNVRTGEDGKLTFKNLSDGKYRLFENSEPAGYKPVQNKPI VAFQIVNGEVRDVTSIVPQDIPAGYEFTNDKHYITNEPIPPKREYPRTGGIGMLPFYLIGCMMMGGVLL YTRKHP

>DM validata19

SERFPNDVDPIETRDWLQAIESVIREEGVERAQYLIDQLLAEARKGGVNVAAGTGISNYINTIPVEEQPE

YPGNLELERRIRSAIRWNAIMTVLRASKKDLELGGHMASFQSSATIYDVCFNHFFRARNEQDGGDLVY FQGHISPGVYARAFLEGRLTQEQLDNFRQEVHGNGLSSYPHPKLMPEFWQFPTVSMGLGPIGAIYQA KFLKYLEHRGLKDTSKQTVYAFLGDGEMDEPESKGAITIATREKLDNLVFVINCNLQRLDGPVTGNGKII NELEGIFEGAGWNVIKVMWGSRWDELLRKDTSGKLIQLMNETVDGDYQTFKSKDGAYVREHFFGKY PETAALVADWTDEQIWALNRGGHDPKKIYAAFKKAQETKGKATVILAHTIKGYGMGDAAEGKNIAH QVKKMNMDGVRHIRDRFNVPVSDADIEKLPYITFPEGSEEHTYLHAQRQKLHGYLPSRQPNFTEKLEL PSLQDFGALLEEQSKEISTTIAFVRALNVMLKNKSIKDRLVPIIADEARTFGMEGLFRQIGIYSPNGQQYT PQDREQVAYYKEDEKGQILQEGINELGAGCSWLAAATSYSTNNLPMIPFYIYYSMFGFQRIGDLCWA AGDQQARGFLIGGTSGRTTLNGEGLQHEDGHSHIQSLTIPNCISYDPAYAYEVAVIMHDGLERMYGE KQENVYYYITTLNENYHMPAMPEGAEEGIRKGIYKLETIEGSKGKVQLLGSGSILRHVREAAEILAKDYG VGSDVYSVTSFTELARDGQDCERWNMLHPLETPRVPYIAQVMNDAPAVASTDYMKLFAEQVRTYV PADDYRVLGTDGFGRSDSRENLRHHFEVDASYVVVAALGELAKRGEIDKKVVADAIAKFNIDADKVN PRLA

>DM validata20

MNTINIAKNDFSDIELAAIPFNTLADHYGERLAREQLALEHESYEMGEARFRKMFERQLKAGEVADNA AAKPLITTLLPKMIARINDWFEEVKAKRGKRPTAFQFLQEIKPEAVAYITIKTTLACLTSADNTTVQAVAS AIGRAIEDEARFGRIRDLEAKHFKKNVEEQLNKRVGHVYKKAFMQVVEADMLSKGLLGGEAWSSWH KEDSIHVGVRCIEMLIESTGMVSLHRQNAGVVGQDSETIELAPEYAEAIATRAGALAGISPMFQPCVVP PKPWTGITGGGYWANGRRPLALVRTHSKKALMRYEDVYMPEVYKAINIAQNTAWKINKKVLAVANV ITKWKHSPVEDIPAIEREELPMKPEDIDMNPEALTAWKRAAAAVYRKDKARKSRRISLEFMLEQANKFA NHKAIWFPYNMDWRGRVYAVSMFNPQGNDMTKGLLTLAKGKPIGKEGYYWLKIHGANCAGVDKV PFPERIKFIEENHENIMACAKSPLENTWWAEQDSPFCFLAFCFEYAGVQHHGLSYNCSLPLAFDGSCS GIQHFSAMLRDEVGGRAVNLLPSETVQDIYGIVAKKVNEILQADAINGTDNEVVTVTDENTGEISEKV KLGTKALAGQWLAYGVTRSVTKRSVMTLAYGSKEFGFRQQVLEDTIQPAIDSGKGLMFTQPNQAAG YMAKLIWESVSVTVVAAVEAMNWLKSAAKLLAAEVKDKKTGEILRKRSAVHWVTPDGFPVWQEYKK PIQTRLNLMFLGQFRLQPTINTNKDSEIDAHKQESGIAPNFVHSQDGSHLRKTVVWAHEKYGIESFALI HDSFGTIPADAANLFKAVRETMVDTYESSDVLADFYDQFADQLHESQLDKMPALPAKGNLNLRDILE SDFAFA

#### >DM validata21

MEKYNPHAIEAKWQRFWEEKGFMKAKDLPGGRGKQYVLVMFPYPSGDLHMGHLKNYTMGDVLAR FRRMQGYEVLHPMGWDAFGLPAENAALKFGVHPKDWTYANIRQAKESLRLMGILYDWDREVTTCE PEYYRWNQWIFLKMWEKGLAYRAKGLVNWCPKCQTVLANEQVVEGRCWRHEDTPVEKRELEQWY LRITAYAERLLKDLEGLNWPEKVKAMQRAWIGRSEGAEILFPVEGKEVRIPVFTTRPDTLFGATFLVLAP EHPLTLELAAPEKREEVLAYVEAAKRKTEIERQAEGREKTGVFLGAYALNPATGERIPIWTADYVLFGYG TGAIMAVPAHDQRDYEFARKFGLPIKKVIERPGEPLPEPLERAYEEPGIMVNSGPFDGTESEEGKRKVIA WLEEKGLGKGRVTYRLRDWLISRQRYWGTPIPMVHCEACGVVPVPEEELPVLLPDLKDVEDIRPKGKS PLEAHPEFYETTCPKCGGPAKRDTDTMDTFFDSSWYYLRYTDPHNDRLPFDPEKANAWMPVDQYIG GVEHAVLHLLYSRFFTKFLHDLGMVKVEEPFQGLFTQGMVLAWTDFGPVEVEGSVVRLPEPTRIRLEIP ESALSLEDVRKMGAELRPHEDGTLHLWKPAVMSKSKGNGVMVGPFVKEQGADIARITILFAAPPENE MVWTEEGVQGAWRFLNRIYRRVAEDREALLETSGVFQAEALEGKDRELYGKLHETLKKVTEDLEALRF NTAIAALMEFLNALYEYRKDRPVTPVYRTAIRYYLQMLFPFAPHLAEELWHWFWPDSLFEAGWPELD EKALEKDVVEVAVQVNGRVRGTIHIPKDAPLEVARAEALKVRNVRAHLEGKEVVKEIYVPGKILNLVVR G

### >DM\_validata24

AQKPLSDDEKFLFVDKNFVNNPLAQADWSAKKLVWVPSEKHGFEAASIKEEKGDEVTVELQENGKKV TLSKDDIQKMNPPKFSKVEDMAELTCLNEASVLHNLRERYFSGLIYTYSGLFCVVINPYKQLPIYSEKIID MYKGKKRHEMPPHIYAIADTAYRSMLQDREDQSILCTGESGAGKTENTKKVIQYLAVVASSHKGKKD TSITQGPSFSYGELEKQLLQANPILEAFGNAKTVKNDNSSRFGKFIRINFDVTGYIVGANIETYLLEKSRAI RQAKDERTFHIFYYLIAGASEQMRNDLLLEGFNNYTFLSNGHVPIPAQQDDEMFQETLEAMTIMGFT EEEQTSILRVVSSVLQLGNIVFKKERNTDQASMPDNTAAQKVCHLMGINVTDFTRSILTPRIKVGRDV VQKAQTKEQADFAIEALAKAKFERLFRWILTRVNKALDKTKRQGASFLGILDIAGFEIFEINSFEQLCINY TNEKLOQLFNHTMFILEQEEYQREGIEWNFIDFGLDLOPCIELIERPTNPPGVLALLDEECWFPKATDTS

FVEKLIQEQGNHAKFQKSKQLKDKTEFCILHYAGKVTYNASAWLTKNMDPLNDNVTSLLNQSSDKFV ADLWKDVDRIVGLDQMAKMTESSLPSASKTKKGMFRTVGQLYKEQLTKLMTTLRNTNPNFVRCIIPN HEKRAGKLDAHLVLEQLRCNGVLEGIRICRQGFPNRIVFQEFRQRYEILAANAIPKGFMDGKQACILMI KALELDPNLYRIGQSKIFFRTGVLAHLEEERDLKI

## >DM validata26

MAQAGFILTRHWRDTPQGTEVSFWLATDNGPLQVTLAPQESVAFIPADQVPRAQHILQGEQGFRLT PLALKDFHRQPVYGLYCRAHRQLMNYEKRLREGGVTVYEADVRPPERYLMERFITSPVWVEGDMHN GTIVNARLKPHPDYRPPLKWVSIDIETTRHGELYCIGLEGCGQRIVYMLGPENGDASSLDFELEYVASRP QLLEKLNAWFANYDPDVIIGWNVVQFDLRMLQKHAERYRLPLRLGRDNSELEWREHGFKNGVFFAQ AKGRLIIDGIEALKSAFWNFSSFSLETVAQELLGEGKSIDNPWDRMDEIDRRFAEDKPALATYNLKDCEL VTQIFHKTEIMPFLLERATVNGLPVDRHGGSVAAFGHLYFPRMHRAGYVAPNLGEVPPHASPGGYV MDSRPGLYDSVLVLDYKSLYPSIVRTFLIDPVGLVEGMAQPDPEHSTEGFLDAWFSREKHCLPEIVTNI WHGRDEAKRQGNKPLSQALKIIMNAFYGVLGTTACRFFDPRLASSITMRGHQIMRQTKALIEAQGYD VIYGDTDSTFVWLKGAHSEEEAAKIGRALVQHVNAWWAETLQKQRLTSALELEYETHFCRFLMPTIRG ADTGSKKRYAGLIQEGDKQRMVFKGLETVRTDWTPLAQQFQQELYLRIFRNEPYQEYVRETIDKLMA GELDARLVYRKRLRRPLSEYQRNVPPHVRAARLADEENQKRGRPLQYQNRGTIKYVWTTNGPEPLDY ORSPLDYEHYLTROLOPVAEGILPFIEDNFATLMTGOLGLF

#### >DM validata27

MTPLRVFRKTTPLVNTIRLSLLPLAGLSFSAFAAQVNIAPGSLDKALNQYAAHSGFTLSVDASLTRGKQ SNGLHGDYDVESGLQQLLDGSGLQVKPLGNNSWTLEPAPAPKEDALTVVGDWLGDARENDVFEH AGARDVIRREDFAKTGATTMREVLNRIPGVSAPENNGTGSHDLAMNFGIRGLNPRLASRSTVLMDGI PVPFAPYGQPQLSLAPVSLGNMDAIDVVRGGGAVRYGPQSVGGVVNFVTRAIPQDFGIEAGVEGQL

SPTSSQNNPKETHNLMVGGTADNGFGTALLYSGTRGSDWREHSATRIDDLMLKSKYAPDEVHTFNS LLQYYDGEADMPGGLSRADYDADRWQSTRPYDRFWGRRKLASLGYQFQPDSQHKFNIQGFYTQTL RSGYLEQGKRITLSPRNYWVRGIEPRYSQIFMIGPSAHEVGVGYRYLNESTHEMRYYTATSSGQLPSGS SPYDRDTRSGTEAHAWYLDDKIDIGNWTITPGMRFEHIESYQNNAITGTHEEVSYNAPLPALNVLYHL TDSWNLYANTEGSFGTVQYSQIGKAVQSGNVEPEKARTWELGTRYDDGALTAEMGLFLINFNNQYD SNQTNDTVTARGKTRHTGLETQARYDLGTLTPTLDNVSIYASYAYVNAEIREKGDTYGNLVPFSPKHK GTLGVDYKPGNWTFNLNSDFQSSQFADNANTVKESADGSTGRIPGFMLWGARVAYDFGPQMADL NLAFGVKNIFDQDYFIRSYDDNNKGIYAGQPRTLYMQGSLKF

## >DM\_validata41

MGTTTMGVKLDDATRERIKSAATRIDRTPHWLIKQAIFSYLEQLENSDTLPELPALLSGAANESDEAPT PAEEPHQPFLDFAEQILPQSVSRAAITAAYRRPETEAVSMLLEQARLPQPVAEQAHKLAYQLADKLRN QKNASGRAGMVQGLLQEFSLSSQEGVALMCLAEALLRIPDKATRDALIRDKISNGNWQSHIGRSPSL FVNAATWGLLFTGKLVSTHNEASLSRSLNRIIGKSGEPLIRKGVDMAMRLMGEQFVTGETIAEALANA RKLEEKGFRYSYDMLGEAALTAADAQAYMVSYQQAIHAIGKASNGRGIYEGPGISIKLSALHPRYSRA QYDRVMEELYPRLKSLTLLARQYDIGINIDAEEADRLEISLDLLEKLCFEPELAGWNGIGFVIQAYQKRC PLVIDYLIDLATRSRRRLMIRLVKGAYWDSEIKRAQMDGLEGYPVYTRKVYTDVSYLACAKKLLAVPNLI YPQFATHNAHTLAAIYQLAGQNYYPGQYEFQCLHGMGEPLYEQVTGKVADGKLNRPCRIYAPVGTH ETLLAYLVRRLLENGANTSFVNRIADTSLPLDELVADPVTAVEKLAQQEGQTGLPHPKIPLPRDLYGHG RDNSAGLDLANEHRLASLSSALLNSALQKWQALPMLEQPVAAGEMSPVINPAEP

#### >DM validata42

MAFAPIPRITWEHREVHLVQFHEPDIYNYSALLLSEDKDTLYIGAREAVFAVNALNISEKQHEVYWKVS EDKKAKCAEKGKSKQTECLNYIRVLQPLSATSLYVCGTNAFQPACDHLNLTSFKFLGKNEDGKGRCPF DPAHSYTSVMVDGELYSGTSYNFLGSEPIISRNSSHSPLRTEYAIPWLNEPSFVFADVIRKSPDSPDGED DRVYFFFTEVSVEYEFVFRVLIPRIARVCKGDQGGLRTLQKKWTSFLKARLICSRPDSGLVFNVLRDVFV LRSPGLKVPVFYALFTPQLNNVGLSAVCAYNLSTAEEVFSHGKYMQSTTVEQSHTKWVRYNGPVPKP RPGACIDSEARAANYTSSLNLPDKTLQFVKDHPLMDDSVTPIDNRPRLIKKDVNYTQIVVDRTQALDG TVYDVMFVSTDRGALHKAISLEHAVHIIEETQLFQDFEPVQTLLLSSKKGNRFVYAGSNSGVVQAPLAF CGKHGTCEDCVLARDPYCAWSPPTATCVALHQTESPSRGLIQEMSGDASVCPDKSKGSYRQHFFKH GGTAELKCSQKSNLARVFWKFQNGVLKAESPKYGLMGRKNLLIFNLSEGDSGVYQCLSEERVKNKTV FQVVAKHVLEVKVVPKPVVAPTLSVVQTEGSRIATKVLVASTKHHHHHH

#### >DM validata43

MADNLPSDFDVIVIGTGLPESIIAAACSRSGQRVLHVDSRSYYGGNWASFSFSGLLSWLKEYQENND VVTENSMWQEQILENEEAIPLSSKDKTIQHVEVFCYASQDLHKDVEEAGALQKNHASVTSAQSAEAA EAAETSCLPTAVEPLSMGSCEIPAEQSQCPGPESSPEVNDAEATGKKENSDAKSSTEEPSENVPKVQD NTETPKKNRITYSQIIKEGRRFNIDLVSKLLYSRGLLIDLLIKSNVSRYAEFKNITRILAFREGTVEQVPCSRA DVFNSKQLTMVEKRMLMKFLTFCVEYEEHPDEYRAYEGTTFSEYLKTQKLTPNLQYFVLHSIAMTSETT SCTVDGLKATKKFLQCLGRYGNTPFLFPLYGQGELPQCFCRMCAVFGGIYCLRHSVQCLVVDKESRKC KAVIDQFGQRIISKHFIIEDSYLSENTCSRVQYRQISRAVLITDGSVLKTDADQQVSILTVPAEEPGSFAV RVIELCSSTMTCMKGTYLVHLTCMSSKTAREDLERVVQKLFTPYTEIEAENEQVEKPRLLWALYFNMR DSSDISRDCYNDLPSNVYVCSGPDSGLGNDNAVKQAETLFQQICPNEDFCPAPPNPEDIVLDGDSS QQEVPESSVTPETNSETPKESTVLGNPEEPSE

### >DM\_validata47

MTTSESPDAYTESFGAHTIVKPAGPPRVGQPSWNPQRASSMPVNRYRPFAEEVEPIRLRNRTWPDRV IDRAPLWCAVDLRDGNQALIDPMSPARKRRMFDLLVRMGYKEIEVGFPSASQTDFDFVREIIEQGAIP DDVTIQVLTQCRPELIERTFQACSGAPRAIVHFYNSTSILQRRVVFRANRAEVQAIATDGARKCVEQA AKYPGTQWRFEYSPESYTGTELEYAKQVCDAVGEVIAPTPERPIIFNLPATVEMTTPNVYADSIEWMSR NLANRESVILSLHPHNDRGTAVAAAELGFAAGADRIEGCLFGNGERTGNVCLVTLGLNLFSRGVDPQI DFSNIDEIRRTVEYCNQLPVHERHPYGGDLVYTAFSGSHQDAINKGLDAMKLDADAADCDVDDML WQVPYLPIDPRDVGRTYEAVIRVNSQSGKGGVAYIMKTDHGLSLPRRLQIEFSQVIQKIAEGTAGEGG EVSPKEMWDAFAEEYLAPVRPLERIROHVDAADDDGGTTSITATVKINGVETEISGSGNGPLAAFVHA

LADVGFDVAVLDYYEHAMSAGDDAQAAAYVEASVTIASPAQPGEAGRHASDPVTIASPAQPGEAGRHASDPVTSKTVWGVGIAPSITTASLRAVVSAVNRAAR

### >DM validata56

MDQRQKLQHWIHSCLRKADKNKDNKMNFKELKDFLKELNIQVDDGYARKIFRECDHSQTDSLEDEEI ETFYKMLTQRAEIDRAFEEAAGSAETLSVERLVTFLQHQQREEEAGPALALSLIERYEPSETAKAQRQM TKDGFLMYLLSADGNAFSLAHRRVYQDMDQPLSHYLVSSSHNTYLLEDQLTGPSSTEAYIRALCKGC RCLELDCWDGPNQEPIIYHGYTFTSKILFCDVLRAIRDYAFKASPYPVILSLENHCSLEQQRVMARHLR AILGPILLDQPLDGVTTSLPSPEQLKGKILLKGKKLGGLLPAGGENGSEATDVSDEVEAAEMEDEAVRS QVQHKPKEDKLKLVPELSDMIIYCKSVHFGGFSSPGTSGQAFYEMASFSESRALRLLQESGNGFVRHN VSCLSRIYPAGWRTDSSNYSPVEMWNGGCQIVALNFQTPGPEMDVYLGCFQDNGGCGYVLKPAFL RDPNTTFNSRALTQGPWWRPERLRVRIISGQQLPKVNKNKNSIVDPKVIVEIHGVGRDTGSRQTAVIT NNGFNPRWDMEFEFEVTVPDLALVRFMVEDYDSSSKNDFIGQSTIPWNSLKQGYRHVHLLSKNGD OHPSATLFVKISIOD

## >DM\_validata58

MGSVTPIPLPKIDEPEEYNTNYILFWNHVGLELNRVTHTVGGPLTGPPLSARALGMLHLAIHDAYFSIC PPTDFTTFLSPDTENAAYRLPSPNGANDARQAVAGAALKMLSSLYMKPVEQPNPNPGANISDNAYA QLGLVLDRSVLEAPGGVDRESASFMFGEDVADVFFALLNDPRGASQEGYHPTPGRYKFDDEPTHPVV LIPVDPNNPNGPKMPFRQYHAPFYGKTTKRFATQSEHFLADPPGLRSNADETAEYDDAVRVAIAMG GAQALNSTKRSPWQTAQGLYWAYAGSNLIGTPPRFYNQIVRRIAVTYKKEEDLANSEVNNADFARLF ALVDVACTDAGIFSWKEKWEFEFWRPLSGVRDDGRPDHGDPFWLTLGAPATNTNDIPFKPPFPAYPS GHATFGGAVFQMVRRYYNGRVGTWKDDEPDNIAIDMMISEELNGVNRDLRQPYDPTAPIEDQPGI VRTRIVRHFDSAWELMFENAISRIFLGVHWRFDAAAARDILIPTTTKDVYAVDNNGATVFQNVEDIRY TTRGTREDEEGLFPIGGVPLGIEIADEIFNNGLKPTPPEIQPMPQETPVQKPVGQQPVKGMWEEEQAP VVKEAP

#### >DM\_validata68

## >DM\_validata69

MHNDKDLSTWQTFRRLWPTIAPFKAGLIVAGVALILNAASDTFMLSLLKPLLDDGFGKTDRSVLVWM PLVVIGLMILRGITSYVSSYCISWVSGKVVMTMRRRLFGHMMGMPVSFFDKQSTGTLLSRITYDSEQV ASSSSGALITVVREGASIIGLFIMMFYYSWQLSIILIVLAPIVSIAIRVVSKRFRNISKNMQNTMGQVTTSA EQMLKGHKEVLIFGGQEVETKRFDKVSNRMRLQGMKMVSASSISDPIIQLIASLALAFVLYAASFPSVM DSLTAGTITVVFSSMIALMRPLKSLTNVNAQFQRGMAACQTLFTILDSEQEKDEGKRVIERATGDVEFR NVTFTYPGRDVPALRNINLKIPAGKTVALVGRSGSGKSTIASLITRFYDIDEGEILMDGHDLREYTLASLR NQVALVSQNVHLFNDTVANNIAYARTEQYSREQIEEAARMAYAMDFINKMDNGLDTVIGENGVLLS GGQRQRIAIARALLRDSPILILDEATSALDTESERAIQAALDELQKNRTSLVIAHRLSTIEKADEIVVVEDG VIVERGTHNDLLEHRGVYAQLHKMQFGQ

WKWWEERYPEGIKWKFLEHKGPVFAPPYEPLPENVKFYYDGKVMKLSPKAEEVATFFAKMLDHEYT TKEIFRKNFFKDWRKEMTNEEKNIITNLSKCDFTQMSQYFKAQTEARKQMSKEEKLKIKEENEKLLKEY GFCIMDNHKERIANFKIEPPGLFRGRGNHPKMGMLKRRIMPEDIIINCSKDAKVPSPPPGHKWKEVRH DNKVTWLVSWTENIQGSIKYIMLNPSSRIKGEKDWQKYETARRLKKCVDKIRNQYREDWKSKEMKVR QRAVALYFIDKLALRAGNEKEEGETADTVGCCSLRVEHINLHPELDGQEYVVEFDFLGKDSIRYYNKVP VEKRVFKNLQLFMENKQPEDDLFDRLNTGILNKHLQDLMEGLTAKVFRTYNASITLQQQLKELTAPDE NIPAKILSYNRANRAVAILCNHQIAPPKTFEKSMMNLQTKIDAKKEQLADARRDLKSAKADAKVMKD AKTKKVVESKKKAVQRLEEQLMKLEVQATDREENKQIALGTSKLNFLDPRITVAWCKKWGVPIEKIYN KTOREKFAWAIDMADEDYEF

## >DM validata80

ASIFGVFDIKTDAVELRKKALELSRLMRHRGPDWSGIYASDNAILAHERLSIVDVNAGAQPLYNQQKT HVLAVNGEIYNHQALRAEYGDRYQFQTGSDCEVILALYQEKGPEFLDDLQGMFAFALYDSEKDAYLI GRDHLGIIPLYMGYDEHGQLYVASEMKALVPVCRTIKEFPAGSYLWSQDGEIRSYYHRDWFDYDAVK DNVTDKNELRQALEDSVKSHLMSDVPYGVLLSGGLDSSIISAITKKYAARRVEDQERSEAWWPQLHS FAVGLPGSPDLKAAQEVANHLGTVHHEIHFTVQEGLDAIRDVIYHIETYDVTTIRASTPMYLMSRKIKA MGIKMVLSGEGSDEVFGGYLYFHKAPNAKELHEETVRKLLALHMYDCARANKAMSAWGVEARVPFL DKKFLDVAMRINPQDKMCGNGKMEKHILRECFEAYLPASVAWRQKEQFSDGVGYSWIDTLKEVAA QQVSDQQLETARFRFPYNTPTSKEAYLYREIFEELFPLPSAAECVPGGPSVACSSAKAIEWDEAFKKMD DPSGRAVGVHOSAYK

### >DM\_validata81

MSIEQTLSQYLPSHPKPQGVTFTYGTAGFRMKADKLDYVTFTVGIIASLRSKYLQGKTVGVMITASHN PPEDNGVKVVDPLGSMLESSWEKYATDLANASPSPSNDSEGEKNSLVEVIKNLVSDLKIDLSIPANVVI ARDSRESSPALSMATIDGFQSVPNTKYQDFGLFTTPELHYVTRTLNDPDFGKPTEDGYYSKLAKSFQEI YTICESNNEKIDITIDAANGVGAPKIQELLEKYLHKEISFTVVNGDYKQPNLLNFDCGADYVKTNQKLPK NVKPVNNKLYASFDGDADRLICYYQNNDNKFKLLDGDKLSTLFALFLQQLFKQIDPTKISLNIGVVQT AYANGSSTKYVEDVLKIPVRCTPTGVKHLHHEAENFDIGVYFEANGHGTVIFNPEAEKKIFDYKPNND NEAKAIKVLQNFSQLINQTVGDAISDLLAVLIVVHYLKLSPSDWDNEYTDLPNKLVKVIVPDRSIFKTTN AERTLVEPKGMODEIDKLVAQYPNGRSFVRASGTEDAVRVYAEADTONNVEELSKAVSELVK

#### >DM validata83

EFALLTCRLDPPSQDLKDGTQEEATKRQEAPVDPRPEGDPQRTVISWRGAVIEPEQGTELPSRRAEVP TKPPLPPARTOGTPVHLNYROKGVIDVFLHAWKGYRKFAWGHDELKPVSRSFSEWFGLGLTLIDALD TMWILGLRKEFEEARKWVSKKLHFEKDVDVNLFESTIRILGGLLSAYHLSGDSLFLRKAEDFGNRLMPAF RTPSKIPYSDVNIGTGVAHPPRWTSDSTVAEVTSIQLEFRELSRLTGDKKFQEAVEKVTQHIHGLSGKK DGLVPMFINTHSGLFTHLGVFTLGARADSYYEYLLKQWIQGGKQETQLLEDYVEAIEGVRTHLLRHSE PSKLTFVGELAHGRFSAKMDHLVCFLPGTLALGVYHGLPASHMELAQELMETCYQMNRQMETGLSP EIVHFNLYPOPGRRDVEVKPADRHNLLRPETVESLFYLYRVTGDRKYODWGWEILOSFSRFTRVPSGG YSSINNVODPOKPEPRDKMESFFLGETLKYLFLLFSDDPNLLSLDAYVFNTEAHPLPIWTPA 000000000011

## >DM validata84

MAVVYYLLAGLIACSHALAAGTPALGDDRGRPWPASLAALALDGKLRTDSNATAAASTDFGNITSA LPAAVLYPSSTGDLVALLSAANSTPGWPYTIAFRGRGHSLMGQAFAPGGVVVNMASLGDAAAPPRI NVSADGRYVDAGGEQVWIDVLRASLARGVAPRSWTDYLYLTVGGTLSNAGISGQAFRHGPQISNVL EMDVITGHGEMVTCSKQLNADLFDAVLGGLGQFGVITRARIAVEPAPARARWVRFVYTDFAAFSAD QERLTAPRPGGGGASFGPMSYVEGSVFVNQSLATDLANTGFFTDADVARIVALAGERNATTVYSIEA TLNYDNATAAAAAVDQELASVLGTLSYVEGFAFQRDVAYAAFLDRVHGEEVALNKLGLWRVPHPWL NMFVPRSRIADFDRGVFKGILQGTDIVGPLIVYPLNKSMWDDGMSAATPSEDVFYAVSLLFSSVAPN DLARLQEQNRRILRFCDLAGIQYKTYLARHTDRSDWVRHFGAAKWNRFVEMKNKYDPKRLLSPGQD IFN

MNKRIVTTALALATLLGVALLSGCQDVSTELKAPKYKTGIAETETKMSAFKGQFPQQYASYMKNNED RIMTDYKGSVPYHKNDNVNPLPKGFKHAOPYLKNLWLGYPFMYEYNETRGHTYAIDDFLNIDRINRF AADGKGNLPATCWNCKTPKMMEWVSQYGDKFWSMDVNEFRAKDKINAHDETIGCANCHDPAT MELRLYSEPLKDWLKRSGKDWQKMSRNEKRTLVCAQCHVEYYFTHKDNGPAAKPVFPWDNGFNPE DMYQYYKGHGAKGPDGKPGPFVDWVHAASKVPMIKMQHPEYETFQDGPHGAAGVSCADCHMQ YVREDGKKISSHWMTSPMKDPEMRACRQCHADKTGEYLRQRVLYTQQKTFDQLLKAQEMSVKAHE AVRLANAYEGHRAANYEALMAEAREMVRKGQLFWDYVSAENSVGFHNPAKALDTLMTSMECSQK AVDLATEATDFGIAPALAGDIKKLVPPILTLSRKLQQDPEFLKQNPWTRLLPALPKAEQVWEGQDRA >DM validata93

MADYLISGGTSYVPDDGLTAQQLFNCGDGLTYNDFLILPGYIDFTADQVDLTSALTKKITLKTPLVSSP MDTVTEAGMAIAMALTGGIGFIHHNCTPEFQANEVRKVKKYEQGFITDPVVLSPKDRVRDVFEAKAR HGFCGIPITDTGRMGSRLVGIISSRDIDFLKEEEHDCFLEEIMTKREDLVVAPAGITLKEANEILQRSKKGK LPIVNEDDELVAIIARTDLKKNRDYPLASKDAKKQLLCGAAIGTHEDDKYRLDLLAQAGVDVVVLDSS QGNSIFQINMIKYIKDKYPNLQVIGGNVVTAAQAKNLIDAGVDALRVGMGSGSICITQEVLACGRPQ ATAVYKVSEYARRFGVPVIADGGIQNVGHIAKALALGASTVMMGSLLAATTEAPGEYFFSDGIRLKKY RGMGSLDAMDKHLSSQNRYFSEADKIKVAQGVSGAVQDKGSIHKFVPYLIAGIQHSCQDIGAKSLTQ VRAMMYSGELKFEKRTSSAQVEGGVHSLHSYEKRLF

EPKLDMNKQKISPAEVAKHNKPDDCWVVINGYVYDLTRFLPNHPGGQDVIKFNAGKDVTAIFEPLHA PNVIDKYIAPEKKLGPLQGSMPPELVCPPYAPGETKEDIARKEQLKSLLPPLDNIINLYDFEYLASQTLTK QAWAFYSSGANDEVTHRENHNAYHRIFFKPKILVDVRKVDISTDMLGSHVDVPFYVSATALCKLGNP LEGEKDVARGCGQGVTKVPQMISTLASCSPEEIIEAAPSDKQIQWYQLYVNSDRKITDDLVKNVEKLG VKALFVTVDAPSLGQREKDMKLKFSNTKAGPKAMKKTNVEESQGASRALSKFIDPSLTWKDIEELKKK TKLPIVIKGVQRTEDVIKAAEIGVSGVVLSNHGGRQLDFSRAPIEVLAETMPILEQRNLKDKLEVFVDGG VRRGTDVLKALCLGAKGVGLGRPFLYANSCYGRNGVEKAIEILRDEIEMSMRLLGVTSIAELKPDLLDLS TLKARTVGVPNDVLYNEVYEGPTLTEFEDA

>DM\_validata108

QDGKTTFEKEGGGGRGPRILENMHESSCKYEKNWPICVDDDWGTKCPSCCRMQGIIDDTDQNYSQ RIDNIRQQLADSQNKYKTSNRVIVETINILKPGLEGAQQLDENYGHVSTELRRRIVTLKQRVATQVNRI KALQNSIQEQVVEMKRLEVDIDIKIRACKGSCARSFDYQVDKEGYDNIQKHLTQASSIDMHPDFQTTT LSTLKMRPLKDSNVPEHFKLKPSPEMQAMSAFNNIKQMQVVLERPETDHVAEARGDSSPSHTGKLIT SSHRRESPSLVDKTSSASSVHRCTRTVTKKVISGPDGPREEIVEKMVSSDGSDCSHLQGGREGSTYHFS GTGDFHKLDRLLPDLESFFTHDSVSTSSRHSIGSSTSSHVTGAGSSHLGTGGKDKFTDLGEEEEDDFGG LQPSGFAAGSASHSKTVLTSSSSSFNKGGSTFETKSLKTRETSEQLGGVQHDQSAEDTPDFKARSFRPA AMSTRRSYNGKGTOK

#### >DM validata125

MASPRELTQNPLKKIFMPYSNGRPALHASQRGVCMTNCPTLIVMVGLPARGKTYISKKLTRYLNFIGV PTREFNVGQYRRDMVKTYKSFEFFLPDNEEGLKIRKQCALAALNDVRKFLSEEGGHVAVFDATNTTRE RRAMIFNFGEQNGYKTFFVESICVDPEVIAANIVQVKLGSPDYVNRDSDEATEDFMRRIECYENSYESL DEEQDRDLSYIKIMDVGQSYVVNRVADHIQSRIVYYLMNIHVTPRSIYLCRAGESELNLKGRIGGDPGL SPRGREFSKHLAQFISDQNIKDLKVFTSQMKRTIQTAEALSVPYEQFKVLNEIDAGVCEEMTYEEIQDH YPLEFALRDQDKYRYRYPKGESYEDLVQRLEPVIMELERQENVLVICHQAVMRCLLAYFLDKAAEELPY LKCPLHTVLKLTPVAYGCKVESIFLNVAAVNTHRDRPQNVDISRPSEEALVTVPAHQ

## >DM\_validata129

QASVEYDNEEDSPQIDARAHRPLDKRQEAAPTLRPVAPPISGTGYQPRPPKQDKQAMKKGPIIYPDA GGCKHPLDELGVLCPTGCELQTTLLKQEKTVKPVLRDLKDRVAKFSDTSTTMYQYVNMIDNKLVKTQ KQRKDNDIILSEYNTEMELHYNYIKDNLDNNIPSSLRVLRAVIDSLHKKIQKLENAIATQTDYCRSPCVA SCNIPVVSGRECEDIYRKGGETSEMYIIQPDPFTTPYRVYCDMETDNGGWTLIQNRQDGSVNFGRAW DEYKRGFGNIAKSGGKKYCDTPGEYWLGNDKISQLTKIGPTKVLIEMEDWNGDKVSALYGGFTIHNEG NKYQLSVSNYKGNAGNALMEGASQLYGENRTMTIHNGMYFSTYDRDNDGWLTTDPRKQCSKEDG GGWWYNRCHAANPNGRYYWGGTYSWDMAKHGTDDGIVWMNWKGSWYSMKKMSMKIKPYFP

## >DM validata130

MTSSLSLHSSFVPSFADLSDRGLISKNSPTSVSISKVPTWEKKQISNRNSFKLNCVMEKSVDGQTHSTV NNTTDSLNTMNIKEEASVSTLLVNLDNKFDPFDAMSTPLYQTATFKQPSAIENGPYDYTRSGNPTRD ALESLLAKLDKADRAFCFTSGMAALSAVTHLIKNGEEIVAGDDVYGGSDRLLSQVVPRSGVVVKRVNT TKLDEVAAAIGPQTKLVWLESPTNPRQQISDIRKISEMAHAQGALVLVDNSIMSPVLSRPLELGADIV MHSATKFIAGHSDVMAGVLAVKGEKLAKEVYFLQNSEGSGLAPFDCWLCLRGIKTMALRIEKQQENA RKIAMYLSSHPRVKKVYYAGLPDHPGHHLHFSQAKGAGSVFSFITGSVALSKHLVETTKYFSIAVSFGS VKSLISMPCFMSHASIPAEVREARGLTEDLVRISAGIEDVDDLISDLDIAFKTFPL

#### >DM validata131

## >DM validata139

HRPLNPAMVAFSNDPLLNDLALNSSYSLLFAVNNMKSEKSAEQFYGKMDNQKMLDLVRASSTKIDF DPTLLPTMNSNPATYQGKRKNLVILLQESLGAQFVGSLGGLPLTPNLDELMQEGWQFTQMYATGTR SVRGIEAVTTGFPPSPSRAVVKLSKSQTGFFTIADLLKEQGYHTQFIYGGEANFDNMKTFFFGNGFDQI VEEKNYTNPGFVGSWGVSDEDLYNKADEEFERLSKGDKPFFSLVFTSSNHSPYEYPEGKIEQYDSEHM TRNNAVKYSDYALGTFFDKAKKSSYWDDTIFIVIADHDARVFGANLVPVKHFHIPALIIGKDIQPRKDD RIANNIDMPPTLLSLIGVDAKTPMIGRDLTKPLAREDERAMMQYDKNFGYLTRDNLVVLSPGEKVST MEYDFESQTMKPLEVDESVIDRAKANALFASKAYQNNWYSSKRTN

GIPSETPQAEVGPTSACGVSLGIPSETPQAEVGPTGCPHRSGPHSAKGSLEKGSPEDKEAKEPLWIRPD APSRCTWQLGRPASESPHHHTAPAKSPKILPDILKKIGDTPMVRINKIGKKFGLKCELLAKCEFFNAGGS VKDRISLRMIEDAERDGTLKPGDTIIEPTSGNTGIGLALAAAVRGYRCIIVMPEKMSSEKVDVLRALGAEI VRTPTNARFDSPESHVGVAWRLKNEIPNSHILDQYRNASNPLAHYDTTADEILQQCDGKLDMLVAS VGTGGTITGIARKLKEKCPGCRIIGVDPEGSILAEPEELNQTEQTTYEVEGIGYDFIPTVLDRTVVDKWFK SNDEEAFTFARMLIAQEGLLCGGSAGSTVAVAVKAAQELQEGQRCVVILPDSVRNYMTKFLSDRWM LOKGFLKEEDLTEKKPWWWHLR

## >DM validata162

GAMDIVVNDDLSCRFLEGFNTRDALCKKISMNTCDEGDPFFVADLGDIVRKHETWKKCLPRVTPFYA VACNDDWRVLGTLAALGTGFDCASNTEIQRVRGIGVPPEKIIYANPCKQISHIRYARDSGVDVMTFDC VDELEKVAKTHPKAKMVLRISTDDSLARCRLSVKFGAKVEDCRFILEQAKKLNIDVTGVSFHVGSGSTD ASTFAQAISDSRFVFDMGTELGFNMHILDIGGGFPGTRDAPLKFEEIAGVINNALEKHFPPDLKLTIVAE PGRYYVASAFTLAVNVIAKKVTPGVQTDVGAHAESNAQSFMYYVNDGVYGSFNCILYDHAVVRPLP QREPIPNEKLYPSSVWGPTCDGLDQIVERYYLPEMQVGEWLLFEDMGAYTVVGTSSFNGFQSPTIYYV VSGLPDHVVRELKSQKS

## >DM\_validata164

SESNKAGEDGASTVERETQEDDTNSIDSSDDLDGFVKILKEIVKLDNIVSSTWNPLDESILAYGEKNSVA RLARIVETDQEGKKYWKLTIIAELRHPFALSASSGKTTNQVTCLAWSHDGNSIVTGVENGELRLWNKT GALLNVLNFHRAPIVSVKWNKDGTHIISMDVENVTILWNVISGTVMQHFELKETGGSSINAENHSGD GSLGVDVEWVDDDKFVIPGPKGAIFVYQITEKTPTGKLIGHHGPISVLEFNDTNKLLLSASDDGTLRIW HGGNGNSQNCFYGHSQSIVSASWVGDDKVISCSMDGSVRLWSLKQNTLLALSIVDGVPIFAGRISQ DGQKYAVAFMDGQVNVYDLKKLNSKSRSLYGNRDGILNPLPIPLYASYQSSQDNDYIFDLSWNCAG NKISVAYSLQEGSVVAIPG

#### >DM validata168

MLRVRCLRGGSRGAEAVHYIGSRLGRTLTGWVQRTFQSTQAATASSRNSCAADDKATEPLPKDCPV SSYNEWDPLEEVIVGRAENACVPPFTIEVKANTYEKYWPFYQKQGGHYFPKDHLKKAVAEIEEMCNIL KTEGVTVRRPDPIDWSLKYKTPDFESTGLYSAMPRDILIVVGNEIIEAPMAWRSRFFEYRAYRSIIKDYFH RGAKWTTAPKPTMADELYNQDYPIHSVEDRHKLAAQGKFVTTEFEPCFDAADFIRAGRDIFAQRSQV TNYLGIEWMRRHLAPDYRVHIISFKDPNPMHIDATFNIIGPGIVLSNPDRPCHQIDLFKKAGWTIITPPT PIIPDDHPLWMSSKWLSMNVLMLDEKRVMVDANEVPIQKMFEKLGITTIKVNIRNANSLGGGFHCW TCDVRRRGTLOSYLD

## >DM\_validata172

MTMEKGMSSGEGLPSRSSQVSAGKITAKELETKQSYKEKRGGFVLVHAGAGYHSESKAKEYKHVCKR ACQKAIEKLQAGALATDAVTAALVELEDSPFTNAGMGSNLNLLGEIECDASIMDGKSLNFGAVGALS GIKNPVSVANRLLCEGQKGKLSAGRIPPCFLVGEGAYRWAVDHGIPSCPPNIMTTRFSLAAFKRNKRK LELAERVDTDFMQLKKRRQSSEKENDSGTLDTVGAVVVDHEGNVAAAVSSGGLALKHPGRVGQAA LYGCGCWAENTGAHNPYSTAVSTSGCGEHLVRTILARECSHALQAEDAHQALLETMQNKFISSPFLA SEDGVLGGVIVLRSCRCSAEPDSSQNKQTLLVEFLWSHTTESMCVGYMSAQDGKAKTHISRLPPGAV AGOSVAIEGGVCRLESPVN

#### >DM validata174

MSRPLLFALTALSLTAASLAHAADKKAADKPAPSAVSKADKALHDKFLTLDTHLDTPAHFGRPGWDI ADHHEVEHDFSQVDLPRMNQGGLDGGFFVVYIGQGELTEKGYTYARDYALHRTIEIREMLAANPDTF EMALTSDDARRIAKAGKKFAFVSMENSWPVGEDLSLVETFYKEGLRMAGPVHFRNNQLADSSTDPK GKIWNGYSPLGLRWLAEANRLGIVIDVSHASDDVVDQSVALSKAPIIASHSGPKAVYDHPRNLDDAR LKKIADAGGAICINSIYLTDTTPSPERKAALEALGRAPDMKTATPEAVKAYADKRAAIDKAHPAARGDF DLYMKSMLHVLKVAGPKGVCVGADWDGGGGMDGFEDITDLPKITARLKAEGYSDADIEAIWSGNVL RIVDAAQAYAKSVTK

>DM\_validata180

MAPVGGKKAKKGILERLNAGEIVIGDGGFVFALEKRGYVKAGPWTPEAAVEHPEAVRQLHREFLRAGS NVMQTFTFYASEDKLENRGNYVLEKISGQEVNEAAADIARQVADEGDALVAGGVSQTPSYLSAKSET EVKKVFLQQLEVFMKKNVDFLIAEYFEHVEEAVWAVETLIASGKPVAATMAIGPEGDLHGVPPGEAAV RLVKAGASIIGVNCHFDPTISLKTVKLMKEGLEAAQLKAHLMSQPLAYHTPDANKQGFIDLPEFPFGLE PRVATRWDIQKYAREAYNLGVRYIGGCCGFEPYHIRAIAEELAPERGFLPPASEKHGSWGSGLDMHTK PWVRARARKEYWENLRIASGRPYNPSMSKPDGWGVTKGTAELMQQKEATTEQQLKELFEKQKFKS

#### >DM validata182

SAVAPAEINEARLVAQYNYSINILAMLLVGFGFLMVFVRRYGFSATTGTYLVVATGLPLYILLRANGIFG HALTPHSVDAVIYAEFAVATGLIAMGAVLGRLRVFQYALLALFIVPVYLLNEWLVLDNASGLTEGFQD SAGSIAIHAFGAYFGLGVSIALTTAAQRAQPIESDATSDRFSMLGSMVLWLFWPSFATAIVPFEQMPQ TIVNTLLALCGATLATYFLSALFHKGKASIVDMANAALAGGVAIGSVCNIVGPVGAFVIGLLGGAISVV GFVFIQPMLESKAKTIDTCGVHNLHGLPGLLGGFSAILIVPGIAVAQLTGIGITLALALIGGVIAGALIKLT GTTKQAYEDSHEFIHLAGPEDEHKAERLVLEAKTEIQGLKNRIDAAVLSAKSEG

## >DM validata191

MGSSSSGLVPRGSPTVTPTVNRENKPTCYPKAEISRLSASQIRNLNPVFGGSGPALTGLRNLGNTCYM NSILQCLCNAPHLADYFNRNCYQDDINRSNLLGHKGEVAEEFGIIMKALWTGQYRYISPKDFKITIGKI NDQFAGYSQQDSQELLLFLMDGLHEDLNKADNRKRYKEENNDHLDDFKAAEHAWQKHKQLNESII VALFQGQFKSTVQCLTCHKKSRTFEAFMYLSLPLASTSKCTLQDCLRLFSKEEKLTDNNRFYCSHCRAR RDSLKKIEIWKLPPVLLVHLKRFSYDGRWKQKLQTSVDFPLENLDLSQYVIGPKNNLKKYNLFSVSNHY GGLDGGHYTAYCKNAARQRWFKFDDHEVSDISVSSVKSSAAYILFYTSLG

### >DM validata195

MNPKSLTRGPRDKPTPLEELLPHAIEFINOYYGSFKEAKIEEHLARLEAVTKEIETTGTYOLTLDELIFATK

MAWRNAPRCIGRIQWSNLQVFDARNCSTAQEMFQHICRHILYATNNGNIRSAITVFPQRSDGKHDF RLWNSQLIRYAGYQMPDGTIRGDAATLEFTQLCIDLGWKPRYGRFDVLPLVLQADGQDPEVFEIPPD LVLEVTMEHPKYEWFQELGLKWYALPAVANMLLEVGGLEFPACPFNGWYMGTEIGVRDFCDTQRY NILEEVGRRMGLETHTLASLWKDRAVTEINVAVLHSFQKQNVTIMDHHTASESFMKHMQNEYRARG GCPADWIWLVPPVSGSITPVFHQEMLNYVLSPFYYYQIEPWKTHIWQNE

### >DM\_validata199

GSHMTPPHNYLAVIKVVGIGGGGVNAVNRMIEQGLKGVEFIAINTDAQALLMSDADVKLDVGRDST RGLGAGADPEVGRKAAEDAKDEIEELLRGADMVFVTAGEGGGTGTGGAPVVASIARKLGALTVGVVT RPFSFEGKRRSNQAENGIAALRESCDTLIVIPNDRLLQMGDAAVSLMDAFRSADEVLLNGVQGITDLI TTPGLINVDFADVKGIMSGAGTALMGIGSARGEGRSLKAAEIAINSPLLEASMEGAQGVLMSIAGGSD LGLFEINEAASLVQDAAHPDANIIFGTVIDDSLGDEVRVTVIAAGFDVSGPGRKPVMGETGGAHRIESA KAGKLTSTLFEPVDAVSVPLHTNGATLSIGGDDDDVDVPPFMRR

## >DM\_validata207

MASYPCHQHASAFDQAARSRGHNNRRTALRPRRQQEATEVRPEQKMPTLLRVYIDGPHGMGKTTT TQLLVALGSRDDIVYVPEPMTYWRVLGASETIANIYTTQHRLDQGEISAGDAAVVMTSAQITMGMPY AVTDAVLAPHIGGEAGSSHAPPPALTLIFDRHPIAALLCYPAARYLMGSMTPQAVLAFVALIPPTLPGT NIVLGALPEDRHIDRLAKRQRPGERLDLAMLAAIRRVYGLLANTVRYLQCGGSWREDWGQLSGTAV PPQGAEPQSNAGPRPHIGDTLFTLFRAPELLAPNGDLYNVFAWALDVLAKRLRSMHVFILDYDQSPA GCRDALLQLTSGMVQTHVTTPGSIPTICDLARTFAREMGEAN

## >DM\_validata219

AEDDPYLGRPEQMFHLDPSLTHTIFNPEVFQPQMALPTADGPYLQILEQPKQRGFRFRYVAEGPSHG GLPGASSEKNKKSYPQVKICNYVGPAKVIVQLVTNGKNIHLHAHSLVGKHCEDGICTVTAGPKDMVV GFANLGILHVTKKKVFETLEARMTEACIRGYNPGLLVHPDLAYLQAEGGGDRQLGDREKELIRQAALQ QTKEMDLSVVRLMFTAFLPDSTGSFTRRLEPVVSDAIYDSKAPNASNLKIVRMDRTAGCVTGGEEIYLL CDKVQKDDIQIRFYEEEENGGVWEGFGDFSPTDVHRQFAIVFKTPKYKDINITKPASVFVQLRRKSDLE TSEPKPFLYYPEIKDKEEVORKROK

## >DM\_validata244

MGSDKIHHHHHHMADTAPQLKRKREQEAEEAETPSTEEKEAGVGNGTSAPVRLPFSGFRVQKVLRES ARDKIIFLHGKVNEDSGDTHGEDAVVILEKTPFQVEHVAQLLTGSPELKLQFSNDIYSTYNLFPPRHLSD IKTTVVYPATEKHLQKYMRQDLRLIRETGDDYRTITLPYLESQSLSIQWVYNILDKKAEADRIVFENPDP SDGFVLIPDLKWNQQQLDDLYLIAICHRRGIRSLRDLTPEHLPLLRNILREGQEAILKRYQVTGDRLRVY LHYLPSYYHLHVHFTALGFEAPGSGVERAHLLAQVIENLECDPKHYQQRTLTFALRTDDPLLQLLQKA OOERN

## >DM\_validata246

MGCFFSKRRKADKESRPENEEERPKQYSWDQREKVDPKDYMFSGLKDETVGRLPGTVAGQQFLIQD CENCNIYIFDHSATVTIDDCTNCIIFLGPVKGSVFFRNCRDCKCTLACQQFRVRDCRKLEVFLCCATQPI IESSSNIKFGCFQWYYPELAFQFKDAGLSIFNNTWSNIHDFTPVSGELNWSLLPEDAVVQDYVPIPTTE ELKAVRVSTEANRSIVPISRGQRQKSSDESCLVVLFAGDYTIANARKLIDEMVGKGFFLVQTKEVSMKA EDAQRVFREKAPDFLPLLNKGPVIALEFNGDGAVEVCQLIVNEIFNGTKMFVSESKETASGDVDSFYNF ADIOMGI

## >DM validata252

MENKGEKIAMNPTVQTLAQKGDKLAVKLVTRGWASLSTNQKRRAEMLAGYTPAILAFTPRRPRMTN PPPRTSRNSPGQAGKSMTMSKTELLSTVKGTTGVIPSFEDWVVSPRNVAVFPQLSLLATNFNKYRITA

LTVKYSPACSFETNGRVALGFNDDASDTPPTTKVGFYDLGKHVETAAQTAKDLVIPVDGKTRFIRDSA SDDAKLVDFGRIVLSTYGFDKADTVVGELFIQYTIVLSDPTKTAKISQASNDKVSDGPTYVVPSVNGNE LQLRVVAAGKWCIIVRGTVEGGFTKPTLIGPGISGDVDYESARPIAVCELVTQMEGQILKITKTSAEQPL OWVVYRM

#### >DM\_validata259

## >DM validata267

GGRRAVRVWCDGCYDMVHYGHSNQLRQARAMGDYLIVGVHTDEEIAKHKGPPVFTQEERYKMVQ AIKWVDEVVPAAPYVTTLETLDKYNCDFCVHGNDITLTVDGRDTYEEVKQAGRYRECKRTQGVSTTD LVGRMLLVTKAHHSSQEMSSEYREYADSFGKCPGGRNPWTGVSQFLQTSQKIIQFASGKEPQPGETV IYVAGAFDLFHIGHVDFLEKVHRLAERPYIIAGLHFDQEVNHYKGKNYPIMNLHERTLSVLACRYVSEV VIGAPYAVTAELLSHFKVDLVCHGKTEIIPDRDGSDPYQEPKRRGIFRQIDSGSNLTTDLIVQRIITNRLE

#### >DM validata269

## >DM validata279

### >DM validata281

# >DM validata286

AQRVQLTATVSENQLGQRLDQALAEMFPDYSRSRIKEWILDQRVLVNGKVCDKPKEKVLGGEQVAI NAEIEEEARFEPQDIPLDIVYEDEDIIIINKPRDLVVHPGAGNPDGTVLNALLHYYPPIADVPRAGIVHRL DKDTTGLMVVAKTVPAQTRLVESLQRREITREYEAVAIGHMTAGGTVDEPISRHPTKRTHMAVHPMG KPAVTHYRIMEHFRVHTRLRLETGRTHQIRVHMAHITHPLVGDPVYGGRPRPPKGASEAFISTLRKF DRQALHATMLRLYHPISGIEMEWHAPIPQDMVELIEVMRADFEEHKDEVDWL

MSNEVEQKKNIKTINDLPGISQTVINKLIEAGYSSLETLAVASPQDLSVAAGIPLSTAQKIIKEARDALDIR FKTALEVKKERMNVKKISTGSQALDGLLAGGIETRTMTEFFGEFGSGKTQLCHQLSVNVQLPPEKGGL SGKAVYIDTEGTFRWERIENMAKALGLDIDNVMNNIYYIRAINTDHQIAIVDDLQELVSKDPSIKLIVVD SVTSHFRAEYPGRENLAVRQQKLNKHLHQLTRLAEVYDIAVIITNQVMARPDMFYGDPTVAVGGHTL YHVPGIRIOLKKSRGNRRIARVVDAPHLPEGEVVFALTEEGIRDAEE

## >DM validata290

### >DM validata291

#### >DM validata294

MSTAAKQNRSTSRVSKKKTAAPKEGAAKKSDKGHKYEYVELAKASLTSAQPQHFYAVVIDATFPYKT NQERYICSLKIVDPTLYLKQQKGAGDASDYATLVLYAKRFEDLPIIHRAGDIIRVHRATLRLYNGQRQF NANVFYSSSWALFSTDKRSVTQEINNQDAVSDTTPFSFSSKHATIEKNEISILQNLRKWANQYFSSYSV ISSDMYTALNKAQAQKGDFDVVAKILQVHELDEYTNELKLKDASGQVFYTLSLKLKFPHVRTGEVVRIR SATYDETSTOKKVLILSHYSNIITFIQSSKLAKELRAKIQDDHSVE

MANRSHHNAGHRAMNALRKSGQKHSSESQLGSSEIGTTRHVYDVCDCLDTLAKLPDDSVQLIICDP PYNIMLADWDDHMDYIGWAKRWLAEAERVLSPTGSIAIFGGLQYQGEAGSGDLISIISHMRQNSKM LLANLIIWNYPNGMSAQRFFANRHEEIAWFAKTKKYFFDLDAVREPYDEETKAAYMKDKRLNPESVEK GRNPTNVWRMSRLNGNSLERVGHPTQKPAAVIERLVRALSHPGSTVLDFFAGSGVTARVAIQEGRN SICTDAAPVFKEYYOKOLTFLODDGLIDKARSYEIVEGAANFGAALORGDVAS

## >DM validata297

MEPHSLRYNLMVLSQDESVQSGFLAEGHLDGQPFLRYDRQKRRAKPQGQWAEDVLGAETWDTETE DLTENGQDLRRTLTHIKDQKGGLHSLQEIRVCEIHEDSSTRGSRHFYYNGELFLSQNLETQESTVPQSS RAQTLAMNVTNFWKEDAMKTKTHYRAMQADCLQKLQRYLKSGVAIRRTVPPMVNVTCSEVSEGNI TVTCRASSFYPRNITLTWRQDGVSLSHNTQQWGDVLPDGNGTYQTWVATRIRQGEEQRFTCYMEH SGNHGTHPVPSGKVLVLQSQRTDFPYVSAAMPCFVIIIILCVPCCKKKTSAAEGP

#### >DM validata298

MPKRGKKGAVAEDGDELRTEPEAKKSKTAAKKNDKEAAGEGPALYEDPPDQKTSPSGKPATLKICSW NVDGLRAWIKKKGLDWVKEEAPDILCLQETKCSENKLPAELQELPGLSHQYWSAPSDKEGYSGVGLL SRQCPLKVSYGIGDEEHDQEGRVIVAEFDSFVLVTAYVPNAGRGLVRLEYRQRWDEAFRKFLKGLASR KPLVLCGDLNVAHEEIDLRNPKGNKKNAGFTPQERQGFGELLQAVPLADSFRHLYPNTPYAYTFWTY MMNARSKNVGWRLDYFLLSHSLLPALCDSKIRSKALGSDHCPITLYLAL

#### >DM validata302

SEGVGTFRMVPEEEQELRAQLEQLTTKDHGPVFGPCSQLPRHTLQKAKDELNEREETREEAVRELQE MVQAQAASGEELAVAVAERVQEKDSGFFLRFIRARKFNVGRAYELLRGYVNFRLQYPELFDSLSPEAV RCTIEAGYPGVLSSRDKYGRVVMLFNIENWQSQEITFDEILQAYCFILEKLLENEETQINGFCIIENFKGFT MQQAASLRTSDLRKMVDMLQDSFPAWFKAIHFIHQPWYFTTTYNVVKPFLKSKLLERVFVHGDDLS GFYOEIDENILPSDFGGTLPKYDGKAVAEOLFGPOAOAENTAF

MRLRKYNKSLGWLSLFAGTVLLSGCNSALLDPKGQIGLEQRSLILTAFGLMLIVVIPAILMAVGFAWKY RASNKDAKYSPNWSHSNKVEAVVWTVPILIIIFLAVLTWKTTHALEPSKPLAHDEKPITIEVVSMDWK WFFIYPEQGIATVNEIAFPANTPVYFKVTSNSVMNSFFIPRLGSQIYAMAGMQTRLHLIANEPGTYDGI SASYSGPGFSGMKFKAIATPDRAAFDQWVAKAKQSPNTMSDMAAFEKLAAPSEYNQVEYFSNVKP DLFADVINKFMAHGKSMDMTQPEGEHSAHEGMEGMDMSHAESAH

>DM validata310

MLESKLKAPVFTATTQGDHYGEFVLEPLERGFGVTLGNPLRRILLSSIPGTAVTSVYIEDVLHEFSTIPGV KEDVVEIILNLKELVVRFLDPKMASTTLILRAEGPKEVRAGDFTPSADVEIMNPDLHIATLEEGGKLYME VRVDRGVGYVPAERHGIKDRINAIPVDAIFSPVRRVAFQVEDTRLGQRTDLDKLTLRIWTDGSVTPLEA LNQAVAILKEHLNYFANPEASLLPTPEVSKGEKRESAEEDLDLPLEELGLSTRVLHSLKEEGIESVRALLAL NLKDLRNIPGIGERSLEEIRQALAKKGFTLKE

>DM validata322

MLEADDQGCIEEQGVEDSANEDSVDAKPDRSSFVPSLFSKKKKNVTMRSIKTTRDRVPTYQYNMNFE KLGKCIIINNKNFDKVTGMGVRNGTDKDAEALFKCFRSLGFDVIVYNDCSCAKMQDLLKKASEEDHT NAACFACILLSHGEENVIYGKDGVTPIKDLTAHFRGDRSKTLLEKPKLFFIQACRGTELDDGIQADSGPI NDTDANPRYKIPVEADFLFAYSTVPGYYSWRSPGRGSWFVQALCSILEEHGKDLEIMQILTRVNDRVA RHFESQSDDPHFHEKKOIPCVVSMLTKELYFSQ

>DM validata325

MIGGDFAVVKAKKSLERRGFGVKRGDKIYLHPLEVVYLQIKGIESFGELEDVLSWAESRMEDFSTYYFVY EDLRDRGNKVKIQGEFLLTKKPYLPISERKTIRMEEIAEKARNFDELRLAVVDEESEITYFRVYEPDMMGE QKEELPEIAGVLSDEYVITKQTEIFSRYFYGSEKGDLVTLSLIESLYLLDLGKLNLLNADREELVKRAREVER NFDRRYEVYRNLKERGFVVKTGFKFGSEFRVYRKVESVDDLPHSEYLVDIADSREIRLIDLARAVRLAQN VRKRMVFAYGKNYLCFERVKV

ISSETGEMGILWEFDPIINKWIRLSMKLKVERKPFAEGALREAYHTVSLGVGTDENYPLGTTTKLFPPIEM ISPISKNNEAMTQLKNGTKFVLKLYKKEAEQQASRELYFEDVKMQMVCRDWGNKFNQKKPPKKIEFL MSWVVELIDRSPSSNGQPILCSIEPLLVGEFKKNNSNYGAVLTNRSTPQAFSHFTYELSNKQMIVVDIQ GVDDLYTDPQIHTPDGKGFGLGNLGKAGINKFITTHKCNAVCALLDLDVKLGGVLSGNNKKQLQQG TMVMPDILPELMPSDNT

>DM\_validata359

SDPPLVANQVVTCPDKKSTAAVILTPTENHFTLKCPKTALTEPPTLAYSPNRQICPAGTTSSCTSKAVTL SSLIPEAEDSWWTGDSASLDTAGIKLTVPIEKFPVTTQTFVVGCIKGDDAQSCMVTVTVQARASSVVN NVARCSYGADSTLGPVKLSAEGPTTMTLVCGKDGVKVPQDNNQYCSGTTLTGCNEKSFKDILPKLTE NPWQGNASSDKGATLTIKKEAFPAESKSVIIGCTGGSPEKHHCTVKLEFAGAAGSAKSAAGTASHVSIF AMVIGLIGSIAACVA

>DM validata362

FLDGIDKAQEEHEKYHSNWRAMASDFNLPPVVAKEIVASCDKCQLKGEAMHGQVDCSPGIWQLDC THLEGKVILVAVHVASGYIEAEVIPAETGQETAYFLLKLAGRWPVKTVHTDNGSNFTSTTVKAACDWA GIKQEDGIPYNPQSQGVIESMNKELKKIIGQVRDQAEHLKTAVQMAVFIHNKKRKGGIGGYSAGERIV DIIATDIQTKELQKQITKIQNFRVYYRDSRDPVWKGPAKLLWKGEGAVVIQDNSDIKVVPRRKAKIIRDY GKQMAGDDCVASRQDED

>DM validata372

DPEDVYDGGYGSKHSPVQLRIGNGGAGQSGLVKELADAFIKSKVDSGSAPFKVAWYKSDTTVTINYL KDGIVDVGITYSPVAERISIKHGISESPSYYAFRDHFMLIGPPSNPAKLSGDSDIADMFSKMHDAAEAG NTKPPVRFLSRYDKSATNIKEAELWLSIGQVPWATAYSTWYHQYITFPIQALTAAILLREYTITDYGTYLS IPRGLRDQMVIYKKGTNDADDPLLNPAHLLVGARAKNAEMAKEFAKWLVSKEGGQKVIEGFKKDGQ OLYSPAPYRH

>DM validata394

#### **DNNNSDNPDAA**

>DM validata396

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>DM validata397

ATLKDITRRLKSIKNIQKITKSMKMVAAAKYARAERELKPARVYGVGSLALYEKADIKTPEDKKKHLIIGV SSDRGLCGAIHSSVAKQMKSEAANLAAAGKEVKIIGVGDKIRSILHRTHSDQFLVTFKEVGRRPPTFGD ASVIALELLNSGYEFDEGSIIFNRFRSVISYKTEEKPIFSLDTISSAESMSIYDDIDADVLRNYQEYSLANIIY YSLKESTTSEQSARMTAMDNASKNASEMIDKLTLTFNRTRQAVITKELIEIISGAAAL

>DM\_validata402

MWNSGFESYGSSSYGGAGGYTQSPGGFGSPAPSQAEKKSRARAQHIVPCTISQLLSATLVDEVFRIG NVEISQVTIVGIIRHAEKAPTNIVYKIDDMTAAPMDVRQWVDTDDTSSENTVVPPETYVKVAGHLRSF QNKKSLVAFKIMPLEDMNEFTTHILEVINAHMVLSKANSQPSAGRAPISNPGMSEAGNFGGNSFMP ANGLTVAQNQVLNLIKACPRPEGLNFQDLKNQLKHMSVSSIKQAVDFLSNEGHIYSTVDDDHFKSTD AE

>DM\_validata415

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## >DM\_validata418

## >DM\_validata426

## >DM\_validata427

#### >DM validata437

# >DM validata453

>DM validata455

SSGLVPRGSHMAEMGSKGVTAGKIASNVQKKLTRAQEKVLQKLGKADETKDEQFEQCVQNFNKQL TEGTRLQKDLRTYLASVKAMHEASKKLNECLQEVYEPDWPGRDEANKIAENNDLLWMDYHQKLVD QALLTMDTYLGQFPDIKSRIAKRGRKLVDYDSARHHYESLQTAKKKDEAKIAKAEEELIKAQKVFEEMN VDLQEELPSLWNSRVGFYVNTFQSIAGLEENFHKEMSKLNQNLNDVLVGLEK

>DM validata463

MSEQQVQELEKKWYALQVEPGKENEAKENLLKVLELEGLKDLVDEVIVPAEEKVVIRAQGKEKYRLSLK GNARDISVLGKKGVTTFRIENGEVKVVESVEGDTCVNAPPISKPGQKITCKENKTEAKIVLDNKIFPGYIL IKAHMNDKLLMAIEKTPHVFRPVMVGGKPVPLKEEEVQNILNQIKRGVKPSKVEFEKGDQVRVIEGPF MNFTGTVEEVHPEKRKLTVMISIFGRMTPVELDFDQVEKI

>DM validata469

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>DM\_validata472

PVEEVMPVLEEKERSASYKPVFVTEITDDLHFYVQDVETGTQFQKLMENMRNDIASHPPVEGSYAPRR GEFCIAKFVDGEWYRARVEKVESPAKIHVFYIDYGNREVLPSTRLGTLSPAFSTRVLPAQATEYAFAFIQ VPQDDDARTDAVDSVVRDIQNTQCLLNVEHLSAGCPHVTLQFADSKGDVGLGLVKEGLVMVEVRK EKQFQKVITEYLNAQESAKSARLNLWRYGDFRADDADEFGYSR

>DM\_validata511

SSEVVLMKPYEKLVERFNEMAAEFLSYFPTVKSVGNLESELDKRRFVILFRAMLRLRNEVKGYNEFDAE DLTIEEQRFADYQSKYLDMSNEFAITSEKEDAESILQDIDFELELVHRDIINVMYILALLQDLKPESSSYPK DRKAVLDTMDSNPELRSKIALIDNFIKLHIDGRQSNDLPADMESDLDKYIATQKAIAIEQVATEEGIDST LLHEYISEYEYLGKPKNE

>DM\_validata517

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>DM validata526

GSHMLGERLGIPAPRRIEAFDNSNIYGADPVSALVVFLDGKPAKKEYRKYKVKTVAGPNDYETMREVV RRRYTRVLKEGLPLPDLIIIDGGKGHLSAVRDVLENELGLDVPLAGLAKDEKHRTSELLAGDPPDVVPLD RQSQEFYLLQRIQDEVHRFAVMFHRKTRQKTMFHSVLDDIPGVGEKRKKALLNYFGSVKKMKEATVE ELQRANIPRAVAEKIYEKLHE

>DM validata528

MEINEKLLRQIIEDVLSEMKGSDKPVSFNAPAASAAPQATPPAGDGFLTEVGEARQGTQQDEVIIAVG PAFGLAQTVNIVGIPHKSILREVIAGIEEEGIKARVIRCFKSSDVAFVAVEGNRLSGSGISIGIQSKGTTVIH QQGLPPLSNLELFPQAPLLTLETYRQIGKNAARYAKRESPQPVPTLNDQMARPKYQAKSAILHIKETKY VVTGKNPQELRVAL

MGSDKIHHHHHHHMTTIPSTAEAKLEMLTTINRAIAGSRPEALPPYPVPAPLSRAEILHQFEDRILDYGA AYTHVSAAELPGAIAKALGNARRVIVPAGIPAPWLTVGMDVLRDEPPLSHAELDRADAVLTGCAVAIS ETGTIILDHRADQGRRALSLIPDFHICVVREDQIVQTVREGVEAVAASVREGRPLTWLSGGSATSDIELV RVEGVHGPRRLQVIVVG

AETVESCLAKSHTENSFTNVWKDDKTLDRYANYEGCLWNATGVVVCTGDETQCYGTWVPIGLAIPE NEGGGSEGGGSEGGGDDIFGELSSGKNAPKTGGGAKGNNASPAGSGNTKNNGASGADIN NYAGQIKSAIESKFYDASSYAGKTCTLRIKLAPDGMLLDIKPEGGDPALCQAALAAAKLAKIPKPPSQA VYEVFKNAPLDFKPAAAHHHHHH

## >DM\_validata539

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MMQPSIKPADEHSAGDIIARIGSLTRMLRDSLRELGLDQAIAEAAEAIPDARDRLYYVVQMTAQAAER ALNSVEASQPHQDQMEKSAKALTQRWDDWFADPIDLADARELVTDTRQFLADVPAHTSFTNAQLL KIMMAQDFQDLTGQVIKRMMDVIQEIERQLLMVLLENIPEQESRPKRENQSLLNGPQVDTSKAGVV ASQDQVDDLLDSLGF

>DM validata593

SNQRMNDYSQPESQSDLAPKSSTIQPQPQPLLSKTPSMSLNLLSSSGPNRQVLPSEPSNFMTLMGQ NGALLTVWALAKRNWLWAYPNIYSQDFGNIRNWKMEPGKHREYFRFVNQSLGTCVEAYGNGLIHD ICSLDKLAQEFELLPTDSGAVVIKSVSQGRCVTYNPVSTTFYSTVTLSVCDGATEPSRDQTWYLAPPVL FATAVN

>DM\_validata603

MGTPKQPSLAPAHALGLRKSDPGIRSLGSDAGGRRWRPAAQSMFQIPEFEPSEQEDASATDRGLGPS LTEDQPGPYLAPGLLGSNIHQQGRAATNSHHGGAGAMETRSRHSSYPAGTEEDEGMEEELSPFRGR SRSAPPNLWAAQRYGRELRRMSDEFEGSFKGLPRPKSAGTATQMRQSAGWTRIIQSWWDRNLGKG GSTPSQ

>DM validata613

>DM validata628

>DM\_validata636

>DM\_validata665

HAGIFTFEEPVTHVSESIGIMEVKVLRTSGARGNVIVPYKTIEGTARGGGEDFEDTCGELEFQNDEIVKTI SVKVIDDEEYEKNKTFFLEIGEPRLVEMSEKKALLLNELGGFTITGKYLYGQPVFRKVHAREHPIPSTVITIA EEYDDKQPLTSKEEEERRIAEMGRPILGEHTKLEVIIEESYEFKS

>DM validata668

>DM\_validata673

MPLVLDLARPVSEEELRRLSELNPGYQWERSPEGRLWVSPTGGESGRRSLQLAYQLARWNEERGLGV VFDSSTGFKFPDGSILSPDAAFVERGAWEALSEAEREGFPPLAPKAVFEVRSASQDPEELRAKMGIYLR NGVLLGVLVDPYARAVEVFRPGKPPLRLEGVERVSLDPELPGFALSLPPLW

>DM\_validata675

ASTFSGVQSLPKFEIHDVRDDPAEGTMTRVAVDGKLLLISQYPQLGPRKVDPNDLSPQFDADRRISVR LRHVDLAYLVGVCKERVPRHRMETKAYTLDFEKSAQGYHLHGKVHRVASQRMEDWSVKFDNHFAV TLEHFLESALDESFGFRQHYATRAAEGGEKIAATSSAEGGARRKRSVSDTSRYH

>DM validata683

MSYYLESTSLYKKAGSENLYFQGASIKKVYRGMKNGAETINDDLEAINSELTSGGNVVHKTGDETIAGK KTFTGNVEVNGSLTLPTKSWSGELGGGIILSLRKKGTTVEYSIGGEISSSILANSNLVNRSVPNEFCPRNR CSLVGHMVGGWNAFHIDIPSSGVCQWFGPTASSGTPRGTGTYPID

>DM\_validata691

RTEAGDAYYSKFANNTPLPALMVSRKKFGSSYVYDKSYKTWDVPIAEQMEQKAKINIFAVAEYTDTQK IKVTVKGKILEGNTLPKSMVQVYLLEDKLIAPQVDGNTTVENYEHNHVLRGAVNGIWGEEFVNLKDYL YTYAVEPLSGMSFVAENYSIVAFVYDVQTFEVYDVVHVKINPQSDGK

>DM\_validata693

NSNTGFLTPESVNGDTPSNPLRPIADDTIDHASHTPGSVSSAFILEAMVNVISGPKVLMKQIPIWLPLG VADQKTYSFDSTTAAIMLASYTITHFGKATNPLVRVNRLGPGIPDHPLRLLRIGNQAFLQEFVLPPVQL PQYFTFDLTALKLITOPLPAATWTDDTPTGSNGALRPGISFHPK

>DM\_validata701

MEPHAKKKSKISASRKLQLKTLLLQIAKQELEREAEERRGEKGRALSTRAQPLELAGLGFAELQDLARQL HARVDKVDEERYDIEAKVTKNITEIADLTQKIFDLRGKFKRPTLRRVRISADAMMQALLGARAKESLDL RAHLKOVKKEDTEKENREVGDWRKNIDALSGMEGRKKKFES

>DM\_validata767

GPLGSHMSQAVQTNGTQPLSKTWELSLYELQRTPQEAITDGLEIVVSPRSLHSELMCPICLDMLKNT MTTKECLHRFCADCIITALRSGNKECPTCRKKLVSKRSLRPDPNFDALISKIYPSRDEYEAHQERVLARIN KHNNQQALSHSIEEGLKIQAMNRLQRG

>DM\_validata769

MMRTVQLRTLRPCIRAQQQPVRPSTSATAAAATAPAPARKCPSSLFAKLGGREAVEAAVDKFYNKIV ADPTVSTYFSNTDMKVQRSKQFAFLAYALGGASEWKGKDMRTAHKDLVPHLSDVHFQAVARHLSD TLTELGVPPEDITDAMAVVASTRTEVLNMPQQ

>DM\_validata770

TSKKKRQRGSRTHGGGSHKNRRGAGHRGGRGDAGRDKHEFHNHEPLGKSGFKRPQKVQEEAATID VREIDENVTLLAADDVAEVEDGGFRVDVRDVVEEADDADYVKVLGAGQVRHELTLIADDFSEGAREK VEGAGGSVELTDLGEERQAEAEETEDADADEE

>DM validata773

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DGVTLNETGLFIANGPQITASGINAGSQKITGVAEGTDANDAVNFGQLKKIETEVKEQVAASGFVKQ DSDTKYLTIGKDTDGDTINIANNKSDKRT

>DM validata784

MQTSHSLPSAQLPLFQEAFWASNGAPLLDDVIDSPSSASIEEPAAFSELSLSGLPGHCLTLLAPILRELSE EQDARWLTLIAPPASLTHEWLRRAGLNRERILLLQAKDNAAALALSCEALRLGRSHTVVSWLEPLSRA ARKQLSRAAQLGQAQSLNIRLG

>DM\_validata797

DEAKISAQSFYQRLLLLNEEAILSGQDFGVRIDVDTRRLTFLQLTADKGWQKWQNDKMTNQTTLKEG LQLDFELGGGAWQKDDRLFNPGSLFDEEMFADEKKEQKQEPAPQLFVLSSGEVTPFTLSIFPKGQEPD EOWRVTAQENGTLRLLAPGESDEE

>DM\_validata811

MSGGLLKALRSDSYVELSQYRDQHFRGDNEEQEKLLKKSCTLYVGNLSFYTTEEQIYELFSKSGDIKKII MGLDKMKKTACGFCFVEYYSRADAENAMRYINGTRLDDRIIRTDWDAGFKEGRQYGRGRSGGQVR DEYRODYDAGRGGYGKLAONO

>DM validata831

MDYKESCPSVSIPSSDEHREKKKRFTVYKVLVSVGRSEWFVFRRYAEFDKLYNSLKKQFPAMALKIPAK RIFGDNFDPDFIKQRRAGLNEFIQNLVRYPELYNHPDVRAFLQMDSPRHQSDPSEDEDERSTSKPHST SRNINLGPTGNPHAKPT

>DM\_validata851

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>DM\_validata852

MSIVRRSNVFDPFADLWADPFDTFRSIVPAISGGGSETAAFANARMDWKETPEAHVFKADLPGVKKE EVKVEVEDGNVLVVSGERTKEKEDKNDKWHRVERSSGKFVRRFRLLEDAKVEEVKAGLENGVLTVTVP KAEVKKPEVKAIQISG

>DM\_validata869

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GQGGGTHSQWNKPSKPKTNMKHMAGAAAAGAVVGGLGGYMLGSAMSRPIIHFGSDYEDRYYRE NMHRYPNQVYYRPMDEYSNQNNFVHNCVNITIKQHTVTTTTKGENFTETDVKMMERVVEQMCIT QYERESQAYYQRGSS

>DM validata965

>DM\_validata989

>DM\_validata1024

>DM validata1028

>DM\_validata1029

>DM validata1046

MEEEKHHHHHLFHHKDKAEEGPVDYEKEIKHHKHLEQIGKLGTVAAGAYALHEKHEAKKDPEHAHK HKIEEEIAAAAAVGAGGFAFHEHHEKKDAKKEEKKKLRGDTTISSKLLF

>DM validata1081

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>DM validata1114

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>DM validata1117

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>DM\_validata1125

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>DM validata1128

MSIDRTSPLKPVSTVQTRETSDTPVQKTRQEKTSAATSASVTLSDAQAKLMQPGVSDINMERVEALKT AIRNGELKMDTGKIADSLIREAQSYLQSK

>DM\_validata1148

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