

Aspergillus fumigatus:

Afu1g12600

MAETSSVSPNPWSTTDIIYLTIVSPLVLAFALEWFLWIAAFLYCLAKVYQKADHWSIRFLAVTMIVLFTLLRGIFLPVMI
VTLPVHLRRRFP AQMVLMLQWFAFGMFSVLLIIPWLLCVYRLVTHSPGRTRKRIKQVLD DRTAPKTVVMPVYKEA
PETLIRAIDSVVDCDYPANCIHVFLSYDGLIDESYLR LIEHLGIPITLESYPQSIDVTYKDARITVSRFKHGGKRHCQKQT
FRLIDMVYADYLERHDNLFVLFIDSDCILDRVCLQNFMYDMELKPGSKHDMLAMTG VITSTTDRGSLTLLQDMEYV
HGQLFERSVESSCGAVTCLPGALTMLRFSAFRKM AKYFADKAEQCEDFDYGKCHLGEDRWLTHLFMVGARKRYQ
IQMCAGAFCKTEAVQTFSSLLKQRRRWFLGFITNEVCMLTDVRLWKRYPLLCLVRFMQNTIRTTALLFFIIALS LITTSS
SINDLPVGFIAISLGLNYVLMFYLGAKLKRYKAWLFPLMFILNPFNWLYMVYGILTAGQRTWGGPRADAATADEHT
SPEEAVELAKAQGDELNVDLTTFRSRGDEKSVPIHPSEKIDGRFSAPELPDGYDSNLNDSNAALTELMTPLSVPRIGI
HTYPPSSDILTSDSLSSIHPLKVEELTGDNDNMKYPDRQPRDTSLSHQMQRTCSNGIVASDSCSSQDDASEMVNK
PEILSPSAHILPHPSQATESSSGEDIYPLHLPSPHQHEAHFAPLNASTRGSMEGNTPEVQRPRRKLPGIPRPIRAQKDP
ESMV

Afu2g01870

MSYNRLDHYGEDGDRSPTMNPQH LADRTSPGRPLNTYQLSDNPYVHDHLQMPSSDRLAEQPTYSVERIPNSYGH
NEAYEQRHHEQYPAYDYAVNPEAHHDAYTQPYEPTVTPQDDYDLGQYHEQHQP YQDDQVPILQPENPFGPDPYS
EYHDDPAAVPTSPAPIRRWKT VKEVQLFHGNLVLD CPIAPKLLSQVPHAEPPGRDEFTHMRYSAATCDPADFYEE
RFTLRQKLFAPRHTELFIVITMYNEDDFL FARTLIGVFKNIEYMCNRTQSKTWGKDAWKKIVVCVISDGRAKINPRT
RAVLAGLVYQDGIKQQVNGKDVTAHIYEYTTQVGL ELKGTQVHIKGRSACPVQMIFCLKEKNQKKINSHRWFQ
AFGRVLDPNICVLLDAGTKPGRDSIYQLWKA FVPEMCGGACGEIKVMLSHGKLLNPLVAGQNF EYKLSNILDKPL
ESAFGFISVLPGAFSAYRYVALQNDKNGQG PLERYFLGEKMHGANAGIFTANMYLAEDRILCFEIVTKRNCRWLLQY
VKSSTGETDVPDRMAEFILQRRRWLNGSFFAAVYIAH FYQIWRSDHSFMRKFMLLVEFIYQTNMIFAWFNIGNFF
LVFHILTYLGD AELLGTTGKVLGVVFEWLYL ATLVTCFVLSLGNRPGGSNKFYMTMVYFWIGIMIYLTFAAIFVTVKSI
QKEVADNSFSVGLFSNSQFFSIFVSLG STYVMWLLASLIFLDPWHMFTSFIQYMLLTPTIYNLVNIYAF CNTHDITW
GTKGDDKAEKLP SANMKPGGKVDVDIPQDDGDLNAQYEAELAKFAQKPPKETK VISEEERQADYKGRSAVVLA
WVFCNFALGAVVLSAAGLDRFNSDKNATDDDRATIYMAVVLWSVAGLSIFKFIGAMWFLVVRMFRGV

Afu2g13430

MSNRFVYSSHSAGFSTSGARSAPQT TQVSTTTLLNALHAFYNSGQSYQLDAGTSLV VNSWATARHTTPDGRTGGTI
DRELAIRAWEHARRAEDGCIVLCSAHQSTPSLFEPFLAALPLPTPSIAFTALAAALRPFVSAVTA FNPSYSLSYALAA SYT
FTLHGNLVGLSFALSTSGINVRKGLL DISAEPGYRAFDFVYYLVTSSTPAEREF LALKDPSAYTLLNRSGTYSPPSYLPTA
DDAAA AEDFRAALKAIGIKGASLRGLLSILAGLLKGN AAGFLVDQEELEDVCEEVGLLGLDPEVLLHKCSTEDREVL I
AGIYEALVDWVIVKANETIANELRANQEGDSGSGSAGQWSEDETVGITVVDIPRPAFGKAVALRGVFD DTLGINAE
MKEDGVQVPPVGHVSLNDLNSVAQVEPDLGITTGP AWREYELDKRQEVLEKVGLEVDMD SFLRQLLFPVEAE
GITV GKRGRFDLMTTLGSSRVWHHISIHPTDDTPDSLNAASPTAAWSAGTVSRQIREWRLAEWANRR LKQMDFTA
DFDVEEFVSRYSRLGCREGRDGVESWLMERGW TNGDAFVGHQRIWMRENAWWEAETMLDLKPD ETPGANSY
MYGSGMLDNGVAQYAANPMAESASLLGSRD NLLQRQSMLAPS VAGVAKSVAPSMPNTLN MAGDYGLGTKGDTK
KWENQLYDGDFTGELDPEFGSPKHIEKKEITFGRRVW SGFVWALTFWIPSFVLR YIGRMKRPDVRMAWREKLV LVF
LILLFNAIVCFYIMAFGDLLCPNKDKVWNSKEVGYHQGD NDFYVSIHGKVYDISKFWRLQHSDNNIDVT ASSMEPFR
GQNLDAYFPPPLTRFCSPMVDQSIKLSYNDTTADMYSYANHNCGPLNWPSTTKLHEITWYENTFLPKIREYFKGDL
VWTRGT VAKQADDSQRYWVIVNKNIYDLTDYFYTLDRMNNQD TYNFLPKSVTDLFKNYPGTDVTDK WGDSEDFK
KSQICLDYVYKGVDFRDTPRCTVNNWILLAF TILICSVVLVKFLAALQLGSKRRPAPQDKFVICLPAYTEGEDALRK
GLDSL TALQYDNKRKLIFVICDGMIVGGGND RPTPKIVLDILGVDPKIDPPALPFKSLGQGS DQLNYGKVYSGLYEYEG
NVVPYIVVVKVGKESEQNRPKPGNRGKRDSQ ILLLNLNRVHHRSPMSPLELEM FHQINNIIGVDPELYEYCLM VDA
DTSVREDSLNR LVAACANDARIAGICGETSLQNEERSWWTMIQVY EYIISHHLAKAFESLFGSVTCLPGCF CMYRLRT
ADKGRPLIISDKVIEYADNDVDLTHKKNLLSLGEDR FLTTLMTKHFP TMSYKFPDAYASTAAPETWSVLLSQR RRWI
NSTIHNLV ELAALKDLGCFCCFSMRVVLVDLIGTLILPATCVYIGYLIYR VASHTGPFYISLAILAGVYGLQAIIFIVKRQ
WQHIGWMIYILAFPIYNFILPLYAFWKQDDFSWGSTRIVLGEKGTKR VVAVEDEAFDPRSIPLQRWDDYALANNLPG

RRGDYGVSQEKMYSTRYGDEAVMEMDDLHSTYSSVKPASTILTGFPPQGRHSSPYMPPQSPAPFGGNIPGNRNSHLSS
FTRYTDNPHQRNMSMGNLSHYQDSPMGMSRHSVGLMQSTDNLLGVARQNSRSPGGGLNSRPVSAFDFRTGGT
GPDEGAITEAIRSCLAEVDLDTVTKKQVRALVEQRLQTTLTGDKKAFLDRQIDQELANM

Afu2g13440

MAAPSPAGGAPSHAQSSPLPAHLQSDTHLTAHLASRFHVGLPTARLSSQALISLNTYTTSTKGPDGGKEGSAMGE
AEDLAKRAFTRLGARGENQAVVFLGESGSGKTTIRSHLLSAFLSFSSTPLSSKLSYAAFLDFTLTTTSLTTQTASKAGLFL
ELQYDGSVVNPTLIGGKIIDHRLERSRITSVPTGERSFHVLYLLAGTSPAEGAHLGFDKAVHVSTSSGAIGHKRWRYL
GHPTQLKVGVDVEGFQHFKTALRKLFPREIAEICQILATILHIGQLEFASGQATTTTHAEESGGYSHEGGETVTIVKN
KDVLSIIAFLGLSVEDLENSFGYRKTIIHRERVTVMLDPKGRQNADELARTIYSLVAVIEAVNQRICAAEDSVANT
ISIVDFPGAQACATGSTLDQLFNNAATELLYNFCLQSFDRKADELEEEVSVPATSYFDNTDAVRGLLKHGNGLLSIL
DDQTRRGRDNLQLESRRRFFENKNPTIIVEGSKRTSLISQNARSAFTVKHFAGEIDYSVNGLIEENGEFISGDLMLRM
KSTKSDVRELFQQAALQTVTHPKKTAIMQAQVSSKPLRMPSPMARRKTSPPSRLAFDAGDADEVESQAESIAKDSS
SGRRKSAMLTSGIQGAAGQFLSSLDIVNKLSSTNLNPFIFCLKPNDRRIANQFDSKCVRAQVQMFQIAEISQRLRN
ADFSVFLPFAEFLGLAEIGNIVVGSDEKEAEVVLDEKRWPGNEARVGSTGVFLSERCWADLAKVGERVVPVYAADM
SDEGGDGLLHPRSTGYGDSKVRLLNPADQSPGAFIYGDEAKQGYFGSRDLDRSDAGNSAFNSGDMFRNHETREQ
MLEKGNKKMEEVDDAPISGSRKRWIALVYLLTFYIPDFAIKLFGRIKRKDVREMAWREKFAINLIWFSCGVAIFFIVAF
PGLVCPTQHVYSAEELSSHNGKDGHSFIAIRGVVFDLDFKMPGHYPHIVPESALKKYAGVDATGLFPVQVSALCQG
KSGSVDPMVLLDYRPTNISGSATTISGTDNSVYHDFRHFTNDSRPDWFYEQMVMLKANYLKGYYGTPKYLNTLG
KKSQSIGSINGKVYDLTSYIAGGRLTKAPPGETVPSDVTDFMDNSVVSFLQSLPGQDLSKHWENLKIDPALRRRMQ
LCLDNLFFVGHVDTRNSAQCEFARYFILAISVLICSIIVFKFLAALQFGRKNVPENLDKFIICQVPAYTEDEESLRAIDSM
ARMRYDDKRKLLVICDGMIIIGQGDRPTPRIVLDILGPVPSVDPEPLSFESLGEGQKQHNMGKVYSGLYEVQGHIV
PFLVIVKVGKPEVSRPGRNGKRDQSMVLMRFLNRVHYNLPMSPMELEMHHQIRNVIGVNPFFYEFILQVDADTV
VAPDSATRMVA AFLNDTRLIGVCGETALNAKNSAVTMIQVYVYISHNLTKAFESLFGSVTCLPGCFTMYRIRSAETA
KPLFVSKEVVDAYAEIRVDTLHMKNLLHLGEDRYLTTLLKHHSKYKTKYISSAKAWTIAPESWTVFLSQRRRWINSTV
HNLIELIPMQQLCGFCCFSMRFVVDLLSTVIQPVTLAYIYLIYWLKDTSTIPYTSILLAAIYGLQALIFIIRKRWEMV
GWMIVYLLALPVFSLALPLYSFVWHMDDFTWGNTRITGEKGRKVVISDEGKFDPASIPKKKWEYQTELWEAQTSD
DRSEVSGISYGTQSYHPAQSEYGFPGSRPMSQLDLPRFGSRMSLAPSEMMSRHADMENLSHLPSSDAILAEIREI
LRTADLMSVTKKSICLELERRFGVNLDLKRPYINSATEAVLAGAL

Afu3g14420

MAYQGGSGSHSPPHYDDNGHRLQDLPHGSYEEASRGLLSHQGGPFTGPFDDPQQHGSSTTRPVSGYLSLSEYAPE
AAYHDPYTQSPGVSVAQSAENPAAAFGVPGRVASPYARSDTSSTEAWRQRQAPGGGPGGLRRYATRKKVLVQG
SVLSVDYVPVSAIQNAIQAKYRNDLEGGSEEFTHMRYAATCDPNEFTLHNGYNLRPAMYNRHTELLIAITYNEDKT
LTSRTLHGVMQNIIRDIVNLKSEFWNKGGPAWQKIVVCLVFDGIDPCDKDTLDVLATIGVYQDGVMKRDVDGKET
VAHIFEYTTQLSVTPNQQLIRPTDDGPSTLPPVQMMFCLKQKNSKINSHRWLFNAFGRILNPEVCILLDAGTKPGP
KSLLSLWEAFYNDKDLGGACGEIHAMLGKGWKNLNLPLVAAQNFYKISNILDKPLESSFGYVSVLPGAFSAYRFRAI
MGRPLEQYFHGDHTLSKQLGKKGIEGMNIFKKNMFLAEDRILCFELVAKAGSKWHLTYVKASKAETDVPEGAPEFIS
QRRRWLNGSFAAGIYSLMHFGRMYKSGHNIVRMFFLHIQMLYNIFSTVLTWFLASYWLTTTVIDLVTGTPSDNNG
NKAFFPGKTATPIINTIVKYVYLGFLLLQFILALGNRPKGSKFSYLASFVVFIIQVYVVIDALYLVVRAFSGSAPMDFTD
QGVEFLKSFSSSGAGIIIIAALATFGLYFVAFMYLDPWHMFTSFPAVMCVQSSYINILNVYAFSNWHDVSWGTKG
SDKADALPSAKTTKDEGKEVVEIDKPQADIDSQFEATVKRALTPYVPPVEKEEKTLEDSYKFRTRLVTFWIFSNAFL
AVCITSDGVDFKGFNTSATDRTRQRFQALLWSNAVVALFRFIGACWFLGKTGLMCCFARR

Afu4g04180

MSSNSSRMYPAPNYEEPPAYGNYGETTSFLADHDSSPRHQGVTMRLLPNSTDVDDDLSVDVERGASHHYGIEYS
DDESTANVQYVPYSGNANGGYNRFYGYNAEESPRPASSLGNVPSIPPAVSAVEVPQYSSRPASPLRPWSPARAA
DWTRPPAPSVTGSQYERADLNGSPRPGTPSSRYGGSRRRPLPAPLFAFGAATGQDTSIDIGDNDPEDPFGGG
GRTNNRHEHRGSIRSFMSDSTMITDEKEEMAKINLNEDDVVDVDPNMHYGPAPEKQSRRGVREAQMSKKEVQLI
NGELILECKIPTILHSFLPRRDDREFTHMRYTAVTCDPDDFTQRGYKLRQQIGSTMRETELFICVTMYNEDETHFTRT

MHGIMRNISHFCSRSKSRWTKDGDWKKIVVCIADGRKKVHPRTLNALAAMGVYQEGIAKNIVNQKQVTAHVVEY
TTQVSLDSDLKFKGAEKGIMPCQVIFCLKEHNQKLNHRWFFNAFGRALQPNICILLDVGTKPEPTALYHLWKA
QDSNVAGAAGEIKAGKGNMGLLNPLVASQNFYKMSNILDKPLESVFGYITVLPGALSAYRFFALQNDADGNP
LNQYFKGETLHGKDADVFTANMYLAEDRILCWELVAKREERWVLKFKVSAVGETDVPDTIPEFISQRRRWLNGAFFA
AVYSLVNVKQLWKT DHSVPRKILLQIEAFYQFLNLLFTYFGLANFYLAFFFIAGSLSDERIDPFHNMGYIFFVLR
YACILVMCLQFIISMGNRPQGAKKLYMSGIIVYSIIMVYAFCALYLVVLELMAKAGVGGKELAVSDSLFINIVV
SLLSTVGLYFYSSFLYLDPWMMFTSSAQYFALLPSYICTLQVYAFCNTHDVTWGTGKDNTINNDLGAARIING
TTVEVEMPSEQLDIDSGYDAALRNLRDRLEVPVPPVSENQQQEDYRAVRTYMVSIWVMVANVILAMSVSEIYGV
DSGGTNVYLGIIILWSVALALIRAVGSTTYAILLVQKIVEGKTKFDAGNIVNSNAATSSVSSRSTAQYGGGTS
FKDKVTEAGWTLKRTAGKAMFWKK

Afu5g00760

MGTPRPYSAHSPQESRSSFYSPSQSPTPTYGRDDAEDQQQSLLRRSLASPNGWSYDDPNVSTDSLRRYTLHDPGI
TAFAPPYPESEAADVRSARMSGYSGIEMDAWQRRQGVKPSALRRYGTRKINLVQGSVLSVDYPVPSAIQNAIQAEYR
DAEEAFHEEFTHMRYTAATCDPDEFTLRNGYNLRPAMYNRHTELLIAITYNEDKVLARTLHGVMQNVRDIVNLKK
SEFWNKGGPWQKIVVCLVFDGIEPCDKNTLDVLATIGVYQDGVMMKKDVGRETVAHIFEYTTQLSVTPTQQLVRP
QPNDPSNLPPVQMLFCLKQKNSKINSHRWLFNAFSRILNPEICILLDAGTKPGSKSLALWEAFYNDKTLGGACGEI
HAMLGRGWRNVLNPLVAAQNFYKISNILDKPLESAFGYVSVLPGAFSAYRYRAIMGRPLEQYFHGDHTLSKRLGKK
GIEGMNIFKKNMFLAEDRILCFELVAKAGYKWHLYVVKASKGETDVPEAAPEYISQRRRWLNGSFAASLYSIMHFGRI
YKSGHSFVRMFFLHIQMIYNCCQLIMTWFSLASYWLTSSVIMDLVGTSSHNYKAWPFGNDASPIVNFVVKYGYLL
VLMQLQFVLALGNRPKGTKLAYTMSFLWFLVQFYVLLSFLVANAFMGGMIDFDQGVGNFLSSFFSSTGGGIVLI
ALVSTYGIYIVASILYMDPWHILTSSWAYFLGMMTTSINILMVYAFCNWHDVSWGTKGSDKADALPSAQTKKADGSKS
NFIEIDKPKQADIDSQFEATVKRALAPYQEPKEDSTISLDDSYRNFRTSLVLLWILSNLLVSLITNDGIRKMCLTVRLGSP
GCA

Afu8g05630

MSLPQRPGKVSPRREETQAFRDTSRRRRRDIESGDNETLSSPHRHHRRHSQSSRKRTRDMDEERLEPGGHRKSQV
RPERSRIDENHPNYHYRQKSQNMPVYPSTTGNELIEGDELNRDSSQSTEHRGREGDFATHGNINKPMERAPSRHR
SKRKKSRKLSRRAATEEKRRQKAMEQVRPPSPWSAYCAITFWAPNFILKCFGMPQKAQREAWREKIGLISLILLIAAF
VGFLTFGFTATVCSAPPLRLKINQVDRGYMIFHGEAYDLSKSKHPAAAGIPADSNVLYDLPHKYGGQDGSFFFQQVN
GACKDLITLKP GSDIPNSDGLAWYFPCTAFNQDGS SKPNFTSPYNGWGCHTSGAARKAFYGLRSSGDVYFTWA
DTRNKSRNLAVYSGNVLDLFDLLNWLDSQLNIPAKFTELRTNP DVRGVDLTYLQAGEDKRIGKLSQIIVGTIDTDT
VGCIAKVVLYVSLIFILSIVIVKVFALFFQWFLSPRYAASKTSMGADSKTRKQEI EDWSNDIYRPGPRLADQHLPDRP
NKRASFLPTTSRFSSPYTVSNGGKQKPYITMASQNSTSRLPSTAGSMYKQSHNSSGSLHLEPSRLNPAASGTSLA
VGAESDVLGSSAYIHEAVVPQPPPEWQPYGFPLAHALCLVTCYSEGEERTTLD SIAMTDYPNSHKTIIVICDGIK GK
GEEYSTPDI VLRMMRDPVIPTDEVEAFSYVAVATGSKRHNMAKVYSGFYDYGETSVIPPEKQQRVPMIMIVKCGTP
AEATQAKPGNRGRKDSQIILMSFLQKVMFDERMTELEYEMFNGLWNVTGIPPDFYEVVLMVDADTKVFPDSLTH
MISAMVKDPDVMGLCGETKIANKTDSWVTMIQVFEYFISHHQSKAFESVFGGVTCLPGCFMYRIKAPKGGQNY
WVPILANPDVVEHYSENVVDTLHKKNLLLLGEDRYLSTLMLRTPKQKQIFVPQAVCKTVVPDKFMVLLSQRRRWIN
STVHNLMELVLRDLCGTFCFSMQFVVFIELVGLTLVPAIAFTFYVVIISIIKKPVQIIPLVLLALILGLPGVLIVVTAHRLV
YVLWMFIYLLSLPIWNFVLPYAYWKFDDFS WGDTRKTAGEQDKGHEAGEGEFDSSKITMKRWRDFERDRRLKMQ
SGWAQPAVGGGYP AQYEPYSDY