

Figure S2. Amino-acid alignment of cluster B GH18 catalytic domains.

	10	20	30	40	50	60
	..... ..... ..... ..... ..... ..... ..... ..... ..... ..... ..... .....					
05455_B._fuckeliana	.....	.....	.....	DITTCQKTY	.....G	.....K
14944_B._fuckeliana	.....	.....	.....	DIVTCQGL	.....G	.....K
13155_S._sclerotioru	.....	.....	.....	GIPYCQ.SL	.....G	.....K
08695_S._sclerotioru	.....	.....	.....	DIVTCQGM	.....G	.....K
11212_S._sclerotioru	.....	.....	.....	DITTCQQTY	.....N	.....K
EAA72615_G._zeae	.....	.....	.....	GIPYCK.DR	.....G	.....V
02184_N._crassa	.....	.....	.....	DIKHCQ.EK	.....G	.....K
04500_N._crassa	.....	.....	.....	DIKTCQSL	.....G	.....K
MGG_03599_M._grisea	.....	.....	.....	QIEQCQRIF	.....R	.....K
MGG_01333_M._grisea	.....	.....	.....	DINTCHSL	.....N	.....K
16099_R._oryzae	.....	.....	.....	DIKFCQDN	.....G	.....K
10112_R._oryzae	.....	.....	.....	DIKTCQKK	.....G	.....K
04523_R._oryzae	.....	.....	.....	DIKTCQSN	.....G	.....V
11152_R._oryzae	.....	.....	.....	DIKTCQAK	.....G	.....V
08153_R._oryzae	.....	.....	.....	DIKYCQSK	.....G	.....K
NP_594130_S._pombe	.....	.....	.....	DIQVCQEN	.....G	.....I
00864_P._nodorum	.....	.....	.....	GIAVCR.KN	.....N	.....K
08680_P._nodorum	.....	.....	.....	DIKTCQTTN	.....Q	.....K
AN8241_E._nidulans	.....	.....	.....	DIPKCQ.AA	.....G	.....K
AN8217_E._nidulans	.....	.....	.....	DITKCQAA	.....G	.....K
Chi18_14_H._jecorina	.....	.....	.....	AITKCK.TA	.....G	.....V
Chi18_16_H._jecorina	.....	.....	.....	SIATCQ.AA	.....G	.....I
Chi18_12_H._jecorina	.....	.....	.....	DIKTCQAN	.....G	.....K
Chi18_17_H._jecorina	.....	.....	.....	DIIECQQTY	.....G	.....K
Chi18_13_H._jecorina	.....	.....	.....	AIQACQAA	.....G	.....K
04407.1_C._cinereus	.....	.....	.....	DIASCQSK	.....G	.....K
6412_P._chrysosporiu	.....	.....	.....	DIKTCQAK	.....G	.....K
2991_P._chrysosporiu	.....	.....	.....	AIQTCQSK	.....G	.....K
40899_P._chrysospori	.....	.....	.....	DIKFCQSK	.....G	.....K
BAA21861.1_A._thalia	.....	.....	.....	QVKDCQSR	.....G	.....I
07348_C._immitis	.....	.....	.....	DITKCQGK	.....G	.....K
XP_452410_K._lactis	.....	.....	.....	DIESCQAK	.....G	.....K
CTS1_S._cerevisiae	.....	.....	.....	DIETCQSL	.....G	.....K
CHT1_C._albicans	.....	.....	.....	DIKSCQQQ	.....G	.....K
CHT3_C._albicans	.....	.....	.....	DIKYCQNK	.....G	.....K
CHT2_C._albicans	.....	.....	.....	DIKTCQSL	.....G	.....K
05283_L._elongisporu	.....	.....	.....	DIKYCQQQ	.....G	.....K
03890_L._elongisporu	.....	.....	.....	DIKGCQAA	.....G	.....K
301747_L._bicolor	.....	.....	.....	DITSCQAK	.....G	.....K
CAC07216_M._anisopli	.....	.....	.....	AIQTCQ.SA	.....G	.....V
Chit30_M._anisopliae	.....	.....	.....	SIKNCQSK	.....G	.....K
AAG25709_M._domestic	.....	.....	.....	EIKSCQAK	.....G	.....I
ABA26457_C._lanatus	.....	.....	.....	EINSCQSL	.....G	.....I
CAJ43737_C._arabica	.....	.....	.....	QIEVCQSL	.....G	.....I
ConcanavalinB_C._ens	.....	.....	.....	QIEECQRM	.....G	.....V
Hevamine_H._brasili	.....	.....	.....	GIRSCQIQ	.....G	.....I
Q8L5C6_T._aestivum	.....	.....	.....	DIKHCQSK	.....G	.....V
Q53NL5_O._sativa	.....	.....	.....	DIKHCQSR	.....G	.....I
Chi18_19_H._jecorina	.....	.....	.....	ELRILQAS	.....G	.....
Chi18_20_H._jecorina	.....	.....	.....	TITMKQA	.....G	.....
01393_N._crassa_B	.....	.....	.....	ELRILQAS	.....G	.....
08394_N._crassa_B	.....	.....	.....	ETQILGYA	.....G	.....
XP_386145_G._zeae_B	.....	.....	.....	ELRILQAS	.....G	.....
XP_382346_G._zeae_B	.....	.....	.....	EVKQLQAA	.....G	.....
MGG_04073_M._grisea	.....	.....	.....	EMRILQAS	.....G	.....
MGG_01876_M._grisea	.....	.....	.....	EAAVLRGS	.....G	.....
01513_S._sclerotioru	.....	.....	.....	ELRILQAT	.....G	.....
03420_S._sclerotioru	.....	.....	.....	QVKTLQSA	.....G	.....

05559\_B.\_fuckeliana .....ELRLIQAS.....G.....  
 07854\_B.\_fuckeliana .....QVKALQSA.....  
 06595\_C.\_immitis\_B .....EMRVMQAS.....G.....  
 AN8245\_E.\_nidulans\_B .....EVSILQES.....G.....  
 236861\_L.\_bicolor\_B .....DVAQMQUES.....G.....  
 185397\_L.\_bicolor\_B .....DVAQMOKS.....G.....  
 UM02758\_U.\_maydis\_B .....FKSRYAGA.....G.....  
 02351\_F.\_neoformans .....IIEAYHDA.....G.....  
 Chi18\_18\_H.\_jecorina .....DIPYCR.SK.....G.....V  
 ZP\_01159542\_Photobac HNLIGYWVN.FV...NGSGC.....PIRLRDIS.PAWDIIIDIAFADND.RNSDG.....  
 ZP\_01234779\_V.\_angus HNLIGYWVN.FV...NGSGC.....PIRLRDIS.PAWDIIIDIAFADND.RNSDG.....  
 NP\_231586\_V.\_cholera HRLIGYWVN.FV...NGAGC.....PIRLADMS.QAWDVIDIAFAEND.RNSTG.....  
 AAO10239\_V.\_vulnific HKLIGYWVN.FV...NGAGC.....PIRLADMS.NAWDVIDIAFAEND.RNSNG.....  
 NP\_902605\_C.\_violace HALVGWYWN.FA...NPSGS.....AFPLSQVS.ADWDVIVVAFADDA.GN..G.....  
 NP\_980050\_B.\_cereus KLLVGWYWN.FD...NGTG.....IIKL RDVS.PKWDVINVSFGETG.GDRS.....  
 634143\_M.\_xanthus KIIVGYWVN.FD...NGST.....NIRLRDVS.AKFNVIQVAFAPVGGPGSG.....  
 ChiA\_S.\_coelicolor HAVTGYWQN.FN...NGAT.....VQKISDVP.SAYDIIAVAFADAT..TTPG.....  
 YP\_527176.1\_S.\_degra HSLVGWYWN.FV...NGAGC.....PMRLSEMS.DKWDVIDIAFADND.PASNG.....  
 YP\_436543\_B\_H.\_cheju HALIGYLHASEFA...NGSG.....YVRMADVS.NDWDVINLSFAEPT.SPTSG.....  
 ChiB\_S.\_coelicolor HALVGYLHASEFA...NGSG.....YTRMADVP.DSWDVIDLAFGEPT.SVTSG.....  
 YP\_432187\_H.\_chejuen RVIVGYWVN.FD...NGSG.....FVRLPDVS.PDWDVIDVAFATPKLGSHS.....  
 ZP\_01353924\_C.\_phyto HILTGYWQN.FD...NGAK.....CLKISDVP.QSYNIIAIAFAEAT..TTAG.....  
 ZP\_00742457\_B.\_thuri KLLVGWYWN.FD...NGTG.....IIKL RDVS.PKWDVINVSFGETG.GDRS.....  
 ZP\_01430879\_S.\_tropi HILTGYWVN.FD...NPAV.....ELRLRDVP.AEYDVVAVAFAEAT..TTPG.....  
 ChiJ\_S.\_coelicolor KVLQGYWEN.WDGAANGVHPPFGWTPITDPQIGAHGYNVLNAAFPVIL..S.DG.....  
 Chi18\_15\_H.\_jecorina KVLQGYWEN.WDGASNGVHPPFGWTPINENPQIQHGYNVINAAFPVIL..P.DG.....  
 YP\_349297\_P.\_fluores KIILMGFWHNPAGPSDGYQRGQFA.NIALENVP.KEYNVVAVAFMKGS.....G.....  
 NP\_719615\_S.\_oneiden GVVVGWYWNWCGG...AGYKGGVAP.CVSLAQVN.PQYNVVDISFMKVY.....G.ATG.S  
 ZP\_01236292\_V.\_angus GVVVGWYWNWADG...QGYKMGNA.PAMS LK DIN.PMYNVVDVSFMKVY.....DVAEG.R  
 ChiC\_S.\_marcescens KIILMGFWHNPAGASDGYQGGQFA.NMNLTDIP.AEYNVAVAFMKGQ.....G.....  
 YP\_237842\_P.\_syringa NIILMGFWHNPWSESQGYQGGMFA.EMPLTGID.KAYNVIAVAFMKGA.....G.....  
 YP\_608169\_P.\_entomop KIILMGWYWNWAGPADGYQRGQFA.NMSLEDVP.RDYNVAVAFMKGS.....G.....  
 NP\_814153\_E.\_faecali KVLVGWYWNWASKGRDGYKQGTSA.SLNLSEVN.QAYNVVPVSFMKSD.....GTTR...  
 YP\_014504\_L.\_monocyt QVLVGWYHWSKSSGNDGYQGGTSA.DIALKDT.P.KAYNVVDVSFMKGD.....GVNR...  
 YP\_071855\_Y.\_pseudot KIFMGFWHNTSYYPANGYKDGQST.NIPLADIP.KEFNVIAVAFMKGS.....G.....  
 YP\_053588\_M.\_florum KTLVGWYHYDWG.....GNFENKIA.LNDKDLLT.SSYNVINLSFLYST.....VEYQ...  
 NP\_471330\_L.\_innocua QVLVGWYHWSKSSGKDGQGGTSA.DIALKDT.P.KAYNVVDVSFMKGD.....GVNR...  
 ZP\_01245639\_B\_F.\_joh KIILGYAHS.WE...NAGAP.....FLYFSQMVGSKFNVVDYSFVETVNRDGYT.....

	70	80	90	100	110	120
05455_B._fuckeliana	..... ..... ..... ..... ..... ..... ..... ..... ..... ..... ..... .....	TIMLSVGG.....	ATYT.....	EGG.....	FTSTQAATTAAN.....	
14944_B._fuckeliana		TILLSIGG.....	ATYT.....	ENE.....	LASADAATTAAK.....	
13155_S._sclerotioru		KILLSLGG.....	ASN.....	TYQ.....	LTGVADGEYFAD.....	
08695_S._sclerotioru		TILLSIGG.....	ATYS.....	DSE.....	LKTSDEATTAAK.....	
11212_S._sclerotioru		TILLSVGG.....	ATYT.....	EGG.....	FTSTAAAITAAN.....	
EAA72615_G._zeae		KILLSIGG.....	VYSDEGS.....	NYK.....	VTTDDKGRDFAD.....	
02184_N._crassa		KVLLSLDG.....	VEH.MGS.....	RFS.....	LSSEAKAEFAS.....	
04500_N._crassa		SILLSIGG.....	ATYS.....	EGG.....	FSSPAEAI SWAD.....	
MGG_03599_M._grisea		KILLSLGG.....	GVA.....	GYQ.....	LTGADAGRAFAD.....	
MGG_01333_M._grisea		TILLSVGG.....	ATYS.....	EGG.....	FPNVEAANKAAD.....	
16099_R._oryzae		KVLLSLGG.....	ATP.....	EYG.....	LNSYEEGESLAD.....	
10112_R._oryzae		TILLSLGG.....	AAG.....	AYG.....	FANDKDAVAFAD.....	
04523_R._oryzae		KVLLSLGG.....	AAG.....	SYG.....	FSSDSEGQTFAE.....	
11152_R._oryzae		KILLSLGG.....	ATG.....	AYG.....	FTSDAEGQQFAE.....	
08153_R._oryzae		LVTLSLGG.....	ATG.....	GVG.....	FQSDSQATSFAD.....	
NP_594130_S._pombe		KVLLSIGG.....	YNG.....	NFS.....	LNNDDDGTNF AF.....	
00864_P._nodorum		KVLLSLGG.....	GLP.....	T.NYY.....	LPDEKTTTWF AK.....	
08680_P._nodorum		TILLSFGGA.....	ETAA.....	DKG.....	YASDDEAKAGAK.....	
AN8241_E._nidulans		KVFLSLGG.....	ATP.....	TYW.....	FDTIDASTKLAD.....	
AN8217_E._nidulans		TILLSIGG.....	ATYS.....	EGG.....	FDSATAANAGAD.....	
Chi18_14_H._jecorina		KIILSLGG.....	ASA.....	FSS.....	FQTADQAAQAGQ.....	

Chi18_16_H._jecorina	KVIISLGG.....AAS.....SYS.....LQSQSQAVALGQ.....
Chi18_12_H._jecorina	TILLSLGG.....DTYS.....QGG.....WASPEAAQDAAA.....
Chi18_17_H._jecorina	TIMMSLFG.....STYS.....ESG.....FSSSSAAVAAAQ.....
Chi18_13_H._jecorina	LVILSMGG.....AVDFS.....AVT.....LSSDAQGQQLAD.....
04407.1_C._cinereus	IVTSLSLGG.....ATG.....AVG.....FESDSQAVSFAQ.....
6412_P._chrysosporiu	IVTSLSLGG.....ATG.....SVG.....FTGDSQAESFAD.....
2991_P._chrysosporiu	IVTISLGG.....ATG.....AAG.....FTSDAQASQFAN.....
40899_P._chrysospori	AITLSLGG.....ATG.....QIG.....FSSDSQAQTFAT.....
BAA21861.1_A._thalia	KVMLSLGGG.....IG.....NYS.....IGSREDAKVIAD.....
07348_C._immitis	TIILSIGG.....ATYS.....EGG.....FGSEEEAIALGAN.....
XP_452410_K._lactis	KVFLSLGG.....AIG.....SYG.....FTDDSQAEEFAT.....
CTS1_S._cerevisiae	KVLLSLGG.....ASG.....SYL.....FSDDSQAETFAQ.....
CHT1_C._albicans	TILLSLGG.....ATG.....NYG.....FSSDSEAVQFAG.....
CHT3_C._albicans	TILLSLGG.....AAG.....SYG.....FSDDATAKQFAH.....
CHT2_C._albicans	TVLLSLGG.....GVG.....DYG.....FSDVASATKFAD.....
05283_L._elongisporu	IVLLSLGG.....ASG.....SYG.....LSSDDVAREFAH.....
03890_L._elongisporu	KVILSLGG.....AAG.....NYG.....FTDGQEATDYAE.....
301747_L._bicolor	IITLSLGG.....AEG.....SFG.....FQSSSQATAFAH.....
CAC07216_M._anisopli	KIILSLGG.....ATS.....SYS.....LQTQAQAEQIGQ.....
Chit30_M._anisopliae	PVILSMGG.....ATDYS.....DVQ.....LNSDAQGQQIAN.....
AAG25709_M._domestic	KVILSIGGA.....SG.....SYS.....LTSADDARQVAT.....
ABA26457_C._lanatus	KVLLSIGGG.....AG.....SYS.....LSSAEDARDVAN.....
CAJ43737_C._arabica	KVLLSLGGG.....GAG.....AGRGPI.....LASPEDARGVAA.....
ConcanavalinB_C._ens	KVFLALGGP.....KG.....TYS.....ACSADYAKDLAE.....
Hevamine_H._brasilie	KVMLSLGGG.....IG.....SYT.....LASQADAKNVAD.....
Q8L5C6_T._aestivum	PVSLSIGGY.....GT.....GYS.....LPSNRSALDLFD.....
Q53NL5_O._sativa	TVLLSIGGQ.....GG.....AYS.....LPTNASAADVAD.....
Chi18_19_H._jecorina	VKVLAM.....LGGG.AKGS.....
Chi18_20_H._jecorina	VKVMGM.....VGGA.APGS.....
01393_N._crassa_B	IKVLGM.....LGGG.AKGS.....
08394_N._crassa_B	VKIMGM.....IGGA.AAGS.....
XP_386145_G._zeae_B	VKVMGM.....LGGG.CKGS.....
XP_382346_G._zeae_B	IKVLGM.....LGGG.AQGS.....
MGG_04073_M._grisea	VKILGM.....LGGH.ARGs.....
MGG_01876_M._grisea	VRVMAM.....VGGA.AEGS.....
01513_S._sclerotioru	IKVMGM.....LGGG.AKGS.....
03420_S._sclerotioru	IRVSCM.....MGGA.AWGT.....
05559_B._fuckeliana	IKVMGM.....LGGG.AKGS.....
07854_B._fuckeliana	.....G.....
06595_C._immitis_B	TKVMGM.....LGGG.AKGS.....
AN8245_E._nidulans_B	IKVMGM.....LGGG.APGT.....
236861_L._bicolor_B	VKVMGM.....LGGG.AAGS.....
185397_L._bicolor_B	VKVMGM.....LGGG.GTGS.....
UM02758_U._maydis_B	MKLMVS.....VFGA.TDTP.....
02351_F._neoformans	IAIMIA.....AFGS.TDQP.....
Chi18_18_H._jecorina	KVILSIGG.....VYNALTS..NYF.....VGDNGTATDFAT.....
ZP_01159542_Photobac	TVHFNLYNGDIRSSCEPLNPQ.....QFK.....DDVRELRAQKG.....
ZP_01234779_V._angus	TVHFNLYNGDIRSSCEPLDPQ.....QFK.....DDVRELRAQKG.....
NP_231586_V._cholera	TVHFNLYAGDIYSSCAPLDPA.....QFK.....QDMKALQAKGK.....
AAO10239_V._vulnific	TVHFNLYSGDIYSSCAPLDPL.....QFK.....QDMAALQAKGK.....
NP_902605_C._violace	NVSFTLDP.....AAGS.AA.....QFI.....QDIRAQQAKGK.....
NP_980050_B._cereus	TVEFS.....PVYGTDA.....EFK.....SDISYLKSKGK.....
634143_M._xanthus	RMAFT.....PYNASVA.....DFK.....ADIALLLKSQGR.....
ChiA_S._coelicolor	AVTFNLDS.....AGLGGYTV.....QFK.....ADVRAKQAAGK.....
YP_527176.1_S._degra	TVHFNLFPG.....TGNCAPAMNAE.....QFK.....ADMRLAQAKGK.....
YP_436543_B_H._cheju	EVEFHLCP..VSECANVESEA.....DFK.....AAIRAKQAAGK.....
ChiB_S._coelicolor	DIRFERCP..VAECPNVESDA.....EFK.....AAIKAKQAAGK.....
YP_432187_H._chejuen	DMEFS.....PFQITPA.....QMK.....ADIAAVQARGQ.....
ZP_01353924_C._phyto	EVTFKLDSN.LASKLGGYTEQ.....QFI.....NDIAAAKAKGQ.....
ZP_00742457_B._thuri	TVEFS.....PVYGTDA.....EFK.....SDISYLKSKGK.....
ZP_01430879_S._tropi	EVTFAVDPG.LSASLGGYTDPA.....DFA.....ADVRTLKGQGR.....
ChiJ_S._coelicolor	TALWEDG.....MDRGVKV.....ATP.....AEMCAAKASGQ.....

Chi18\_15\_H.\_jecorina TALWQDG.....MDATVKV.....ATP.....AEMCQAKAAGA.....  
 YP\_349297\_P.\_fluores IPTFKP.....FNVSDA.....EFR.....RQVGVLNSQGR.....  
 NP\_719615\_S.\_oneiden IPTFKLDPA.....VGLSEA.....QFI.....DQIGELNRQGR.....  
 ZP\_01236292\_V.\_angus IPTFHLDAE.....TGLTEQ.....QFI.....DQIKELNDQGR.....  
 ChiC\_S.\_marcescens IPTFKP.....YNLSDA.....EFR.....RQVGVLNSQGR.....  
 YP\_237842\_P.\_syringa IPTFKP.....YNLSDE.....AFR.....AQVAELNAQGR.....  
 YP\_608169\_P.\_entomop IPTFKP.....YNLSDA.....EFR.....RQVGVLNSQGR.....  
 NP\_814153\_E.\_faecali IPTFKP.....YNQTDI.....AFR.....QEVAQLNSQGR.....  
 YP\_014504\_L.\_monocyt IPTFKP.....VGINDS.....DFR.....AQVGALNKEGR.....  
 YP\_071855\_Y.\_pseudot IPTFRP.....YNGSDE.....QFR.....TQVDKLHSEGR.....  
 YP\_053588\_M.\_florum MPTYSP.....NN..PA.....AIK.....EGVKALQSQGK.....  
 NP\_471330\_L.\_innocua IPTFKP.....VGINDS.....DFR.....AQVGALNKEGR.....  
 ZP\_01245639\_B\_F.\_joh PILTTNDTR..YLTNGVFNKQ.....LLK.....NDIKSLRDSGV.....

	130	140	150	160	170	180
05455_B._fuckeliana	.....	NLWSWFGP..DTS.....	G.....	DIRPFG.....	SAVID	
14944_B._fuckeliana	.....	NVWAAFPG..KTS.....	SS.....	TTRPFG.....	DAVVD	
13155_S._sclerotioru	.....	FLWGSYGP..FKQS.....	WLDN..GGIRPMDGGYYGTDP..	NIHIDID		
08695_S._sclerotioru	.....	NVWAAFPG..KTS.....	SS.....	TTRPFG.....	DAVVD	
11212_S._sclerotioru	.....	NIWSWFGP..YSS.....	G.....	VVRPFG.....	TAVVD	
EAA72615_G._zeae	.....	FLYKSFGP..HNEH.....	SNP.....	IRPFDSIDNDGN..	TVHAAVD	
02184_N._crassa	.....	FLWGAFGP..YDAK.....	WTG.....	PRPFDFAGHR.....	VSVD	
04500_N._crassa	.....	RLWAMFGP..VSN.....	SD.....	KRPFG.....	TAVID	
MGG_03599_M._grisea	.....	QLWAFI GP..RPDG.....	STL.....	PRPFDGESR.....	VADLD	
MGG_01333_M._grisea	.....	NLWAMFGPPPAAST.....	NDAATVNRPF.....	TAYID		
16099_R._oryzae	.....	ELWYTFGG..GSD.....	TN.....	TFRPFG.....	NASVD	
10112_R._oryzae	.....	TLWATFGG..GKS.....	ER.....	RPFG.....	DAVVD	
04523_R._oryzae	.....	TIWNLFGG..GTS.....	DT.....	RPFD.....	DAVID	
11152_R._oryzae	.....	TLWNLFGR..GSS.....	ET.....	RPFG.....	DAIID	
08153_R._oryzae	.....	TIWNLFGL..GES.....	SI.....	RPFG.....	DAILD	
NP_594130_S._pombe	.....	QVWNIFGS..GED.....	SY.....	RPFG.....	KAVVD	
00864_P._nodorum	.....	FLVGAFGP..KQDG.....	WTG.....	PRPIG.....	DEFVD	
08680_P._nodorum	.....	KIWEFGP..KTA.....	AS.....	SIRPFD.....	DAVVD	
AN8241_E._nidulans	.....	FLWGAFGP..VTDA.....	WTVA..DKPRPF.....	NAVVD		
AN8217_E._nidulans	.....	LLWATFGP..DQN.....	DT.....	KIHRPF.....	SAVID	
Chi18_14_H._jecorina	.....	YLWNAYG..GGS.....	GVT.....	RPLG.....	NNVMD	
Chi18_16_H._jecorina	.....	YLWNAYGN..SGNT.....	TVQ.....	RPFG.....	NVFN	
Chi18_12_H._jecorina	.....	QVWAMFGP..VQS.....	DS.....	SAPRPF.....	DAVVD	
Chi18_17_H._jecorina	.....	EIWAMYGP..VQS.....	GN.....	STPRPF.....	DAVVD	
Chi18_13_H._jecorina	.....	TVWNLFGL..GTAN.....	PTL.....	RPFG.....	SVKLD	
04407.1_C._cinereus	.....	TVWDMFLG..GRS.....	DM.....	RPFG.....	NAVLD	
6412_P._chrysosporiu	.....	TIWNLFGL..GSS.....	ST.....	RPFG.....	DAVLD	
2991_P._chrysosporiu	.....	TIWNLFGL..GSS.....	ST.....	RPFG.....	SAVLD	
40899_P._chrysospori	.....	QIWNLFGL..GSS.....	ST.....	RPFG.....	TAILD	
BAA21861.1_A._thalia	.....	YLWNNFLG..GK.....	SS.....	SRPLG.....	DAVLD	
07348_C._immitis	.....	LIWETFGP..QKN.....	SS.....	RP.....	DATVD	
XP_452410_K._lactis	.....	TLWNTFGE..GTAD.....	NV.....	ERPFD.....	TAVVD	
CTS1_S._cerevisiae	.....	TLWDTFGE..GTG.....	AS.....	ERPFD.....	SAVVD	
CHT1_C._albicans	.....	TLWNKFG..GK.....	DS.....	ERPFD.....	DAIVD	
CHT3_C._albicans	.....	TLWDLFGN..SKNL.....	ATN.....	DRPFY.....	DAVLD	
CHT2_C._albicans	.....	TLWNKFG..AGE.....	DP.....	ERPFD.....	DAVVD	
05283_L._elongisporu	.....	TVWDLFGN..SDTL.....	SSD.....	ERPFG.....	DAVLD	
03890_L._elongisporu	.....	TLWNKFGP..TGS.....	DD.....	ERPFD.....	DAVVD	
301747_L._bicolor	.....	TIWNMFLG..GSS.....	AT.....	RPFG.....	HAVLD	
CAC07216_M._anisopli	.....	YLWDSYGN..SGNK.....	TVQ.....	RPFG.....	SNFVN	
Chit30_M._anisopliae	.....	TVWNLFGL..GTDH.....	KEL.....	RPFG.....	DVKLD	
AAG25709_M._domestic	.....	YLWNNFLG..GQ.....	SS.....	SRPLG.....	AAVLD	
ABA26457_C._lanatus	.....	FLWNNFLG..GQ.....	SS.....	SRPLG.....	DAVLD	
CAJ43737_C._arabica	.....	YLWNNYLG..GQ.....	SD.....	SRPLG.....	AAVLD	
ConcanavalinB_C._ens	.....	YLHTYFLS..ER.....	RE.....	G..PLG.....	KVALD	
Hevamine_H._brasili	.....	YLWNNFLG..GK.....	SS.....	SRPLG.....	DAVLD	



Q8L5C6_T._aestivum	.....HLWNSYFG...GSKP.....SV.....PRPFG.....DAWLD
Q53NL5_O._sativa	.....NLWNAYLG...GHRA.....GV.....ARPGD.....DAAVD
Chi18_19_H._jecorina	.....YAR...LDA...SD.....EQ...FERYRPLR.....DVIRARGLD
Chi18_20_H._jecorina	.....FNTQTLDS...PD.....SAT...FEHYQGQLR.....DAIVNFQLE
01393_N._crassa_B	.....FAR...LDV...PDPDSPDKTALER...FERYYQPLK.....RLIKERGLD
08394_N._crassa_B	.....FTPDTLDS...AN.....ETV...FNRYYGQLH...ETIKRYGLQ
XP_386145_G._zeae_B	.....YAR...LDA...DE.....NT...FERFYCPVR...DMIRERALD
XP_382346_G._zeae_B	.....YTK...LDG...SL.....EG...FHKWYQPLR...KMIKWAGFD
MGG_04073_M._grisea	.....YER...LDA...DQ.....AQ...FERYYAALH...RMIEHHALE
MGG_01876_M._grisea	.....FSRRTLDA...PDG...DPD...FEKYYGQLR...DVLRFGLQ
01513_S._sclerotioru	.....FTR...LDQ...DE.....AT...FELYYGPLR...NLIRERGLD
03420_S._sclerotioru	.....WNY...FTG...DD.....NQ...FHQYDPLLN...NFIKKYNLN
05559_B._fuckeliana	.....FTR...LDQ...DD.....IT...FELYIPLR...NLIRERGLD
07854_B._fuckeliana	.....FTR...LDQ...DD.....IT...FELYIPLR...NLIRERGLD
06595_C._immitis_B	.....YQR...LDG...SV.....AD...FEAFYCPLR...DMIRTRNLN
AN8245_E._nidulans_B	.....FTC...LDG...DE.....AQ...FEQYGPPL...DMIRRHGLD
236861_L._bicolor_B	.....YAN...LAS...D.....FDDYYQLLS...TCITNHGLD
185397_L._bicolor_B	.....YES...LSK...D.....FADYYHLLS...TCITNHGLD
UM02758_U._maydis_B	.....QS...MGK...N.....ATALGRTIA...SFVKKNGLD
02351_F._neoformans	.....TT...GGA...D.....AKEVAQRLA...SFVMEYNLD
Chi18_18_H._jecorina	.....FLYNAFGP...YNAS.....YTG...PRPFDDITTG...LPTSVD
ZP_01159542_Photobac	.....IIVLSLGG...AEGT...ITLNNDA...DQANFVSSLT...DIINEWGF
ZP_01234779_V._angus	.....IIVLSLGG...AEGT...ITLNNDA...DQANFVSSLT...DIINEWGF
NP_231586_V._cholera	.....VFVLSLGG...AEGT...ITLNTDQ...DEANFVSSLT...ALIKEWGF
AAO10239_V._vulnific	.....KFVLSLGG...AEGT...ITLNTDQ...DEANFVSSLT...ELINEWGF
NP_902605_C._violace	.....KVVLISLGG...QNGS...VTLNNAT...QVQNFVNSLY...GILTQYGF
NP_980050_B._cereus	.....KVVLISIGG...QNGV...VLLPDNA...AKQRFINSIQ...SLIDKYGF
634143_M._xanthus	.....KVLISIGG...ANGT...VHLDDAT...ARQDFATTMQ...ALIDTYGF
ChiA_S._coelicolor	.....KVIISVGG...EKGT...VSVNSSA...SATNFANSVY...SVMREYGF
YP_527176.1_S._degra	.....VFVLSLGG...AEGT...ITLNTDA...DEVNFVNSLT...NLINWGF
YP_436543_B_H._cheju	.....KVLISIGG...ANGQ...VQLTSTE...AKDAFVRSVS...AIIDKYGLD
ChiB_S._coelicolor	.....KVLISIGG...QNGQ...VQLTSTA...ARDKFVSSVS...AIIDEYGLD
YP_432187_H._chejuen	.....KVIISIGG...AEAI...VRLTDAN...AEFEFVDSMT...ALIREYGF
ZP_01353924_C._phyto	.....KVIISVGG...ETGT...VSVNNTT...SATNFANSVY...ALMVKYGF
ZP_00742457_B._thuri	.....KVVLISIGG...QNGV...VLLPDNA...AKQRFINSIQ...SLIDKYDF
ZP_01430879_S._tropi	.....KVIISVGG...ETGR...VTVNDAA...SAVAFADSVY...ALIQQYGF
ChiJ_S._coelicolor	.....TLLSIGG...ATAG...IDLNSTA...VADRFDVITIV...PILKEYNFD
Chi18_15_H._jecorina	.....TILMSIGG...ATAA...IDLSSSA...VADKFISTIV...PILKQYNEF
YP_349297_P._fluores	.....AVLISLGG...ADA...HIELRAG...QEQLANEIII...RLVETYGF
NP_719615_S._oneiden	.....AVLIALGG...ADA...HIELRKG...QEHDLANEIII...RLVEKYGF
ZP_01236292_V._angus	.....SVLIALGG...ADA...HVEMKTG...DEQAFADIII...RLTDLYGF
ChiC_S._marcescens	.....AVLISLGG...ADA...HIELKTG...DEDRLKDEIII...RLVEVYGF
YP_237842_P._syringa	.....AVLISLGG...ADA...HIELHAG...QEEALAYEIII...RLVEVYGF
YP_608169_P._entomop	.....VVLMSLGG...ADA...HIALNPG...HEQPLANEIII...RLVETYGF
NP_814153_E._faecali	.....AVLLALGG...ADA...HIQLVKG...DEQAFANEIII...RQVETYGF
YP_014504_L._monocyt	.....AVLLALGG...ADG...HVELKAG...DEEAFANEIII...RQVETYGF
YP_071855_Y._pseudot	.....SVLISLGG...ADA...EISLTSQ...DEAAFVAEIK...RLVDVYGF
YP_053588_M._florum	.....RVLISMGG...ATAE...HMKFRND...QKDQLKTAIK...SVINEYGF
NP_471330_L._innocua	.....AVLLALGG...ADG...HVELKAG...DEQAFANEIII...RQVETYGF
ZP_01245639_B_F._joh	.....PVIVSIGG...QNGH...VVLDNVT...QKNIFVNGLK...AIIDEYQFD

	190	200	210	220	230	240
05455_B._fuckeliana	GFDFDFEST	.....	VSN	.....	MPTFANQLRSLM	D...TDT
14944_B._fuckeliana	GFDFDIETQG	.....	LTN	.....	LDVFAQELRTLS	D...AET
13155_S._sclerotioru	GFDFDIETAPDS	.....	SEG	.....	YIAMINRLREHF	A...ENP
08695_S._sclerotioru	GFDFDIETVG	.....	LAN	.....	LEVFAQELRSLS	D...AET
11212_S._sclerotioru	GFDFDFEST	.....	VSN	.....	MPAFANQLRSLM	D...TDN
EAA72615_G._zeae	GFDFDIEHDL	.....	NGP	.....	YIAMINRLRELD	E...G..
02184_N._crassa	GFNLDGELKLNAG	.....	EGA	.....	YAAMAKKLRELY	N...GNA
04500_N._crassa	GFDFDFEAV	.....	AQN	.....	MVPFATRLRSLM	D...SAA
MGG_03599_M._grisea	GFDLDIEFPV	.....	GEG	.....	YRALALRLRAHY	A...SVP

MGG_01333_M._grisea	GFDDLDFETHG.....	IKN.....	LAAFARRLRQVM.....	D...	TAA
16099_R._oryzae	GFDLDIENG.....	AKDG.....	YPAFVNRMREHY.....	A...	KET
10112_R._oryzae	GFDLDIEGG.....	GSTG.....	YAAMVKRLRSHF.....	N...	SDR
04523_R._oryzae	GIDLDIEGG.....	SSTG.....	YAAFVTALRSK.....		
11152_R._oryzae	GIDLDIEGG.....	SSGG.....	YAALVTALRSKS.....	A...	S..
08153_R._oryzae	GIDLDIEGG.....	GSNH.....	YTTFLQALSS.H.....	F...	VNA
NP_594130_S._pombe	GFDFEVNKG.....	TNTA.....	YSAFAKRMLEIY.....	A...	SDP
00864_P._nodorum	GFDLDEAEASKVPRPE.....	LISAN.....	YGFLVNELKRFN.....	N...	D..
08680_P._nodorum	GFDFDFEDETAVF.....	ASRH.....	RDAFIKELSSLA.....	R...	AAET
AN8241_E._nidulans	GFDFDIEFFG.....	SKG.....	YANMIKRRRRF.....	G...	EVF
AN8217_E._nidulans	GFDFDFEAA.....	VTN.....	TGVFATRLRALA.....	D...	ADT
Chi18_14_H._jecorina	GFDLDIENPGT.....	NEN.....	YAALVSALRSNF.....	A...	SDP
Chi18_16_H._jecorina	GFDFDIELNAG.....	SOY.....	YQYLISLRSNF.....	A...	NDP
Chi18_12_H._jecorina	GFDFDFEST.....	TNN.....	LVAFGAQLRTL.....	DAAATDS	
Chi18_17_H._jecorina	GFDFDLEDP.....	IENN.....	MEPFAAELRSLI.....	D...	AST
Chi18_13_H._jecorina	GVDLNETG.....	NPTG.....	YLAMAQRFKSNF.....	A...	KDT
04407.1_C._cinereus	GVDLDIEGG.....	TSGH.....	YGAFVNKIRA.L.....	A...	APT
6412_P._chrysosporiu	GVDLDIEGG.....	TSTG.....	YAAFINRIQS.H.....	A...	SGA
2991_P._chrysosporiu	GVDLDIEGG.....	STQY.....	FTTFVSTLRS.L.....	M...	NGG
40899_P._chrysospori	GIDLDIESG.....	TPAH.....	YAAFVNQIRS.L.....	A...	APT
BAA21861.1_A._thalia	GIDFNIELGS.....	PQH.....	WDDLARTLSKFS.....	H.....	R
07348_C._immitis	GFDLDFEAT.....	VRN.....	MVPFANRLRSLM.....	A...	ADA
XP_452410_K._lactis	GFDFDIENN.....	NPTG.....	YASLATKLRSLY.....	A...	KGS
CTS1_S._cerevisiae	GFDFDIENN.....	NEVG.....	YSALATKLRTL.....	A...	EGT
CHT1_C._albicans	GFDFDIENK.....	DQTG.....	YAALATQLR.KY.....	F...	STG
CHT3_C._albicans	GFDFDIENN.....	WSTG.....	YPALATELRTLF.....	Q...	KDT
CHT2_C._albicans	GFDFDIEHG.....	GATG.....	YPELATALRGKF.....	A...	KDT
05283_L._elongisporu	GFDDYDIENN.....	SPTG.....	YAAMASELRTIF.....	A...	TDT
03890_L._elongisporu	GFDFDIELG.....	TDVG.....	YPQLATALRSKF.....	A...	SDS
301747_L._bicolor	GIDLDFENG.....	TSDY.....	FATFVNTIRS.L.....	E...	KGT
CAC07216_M._anisopli	GFDFDIEVNGGS.....	SOY.....	YQYMIAKLRSNF.....	G...	SDE
Chit30_M._anisopliae	GVDLNETN.....	DGTG.....	YLAMTKQFKANF.....	Q...	KDT
AAG25709_M._domestic	GIDFDIEGGT.....	DQH.....	WDDLARYLSGYS.....	K.....	R
ABA26457_C._lanatus	GIDFDIESGS.....	GQW.....	WDELARQLKGFG.....		
CAJ43737_C._arabica	GIDFDIEYGS.....	NLY.....	WDDLARALSGYS.....	T...	A
ConcanavalinB_C._ens	GIHFDIQKPD.....	ELN.....	WDNLLEELYQIK.....	D...	VY
Hevamine_H._brasili	GIDFDIEHGS.....	TLY.....	WDDLARYLSAYS.....	K.....	Q
Q8L5C6_T._aestivum	GVDLFLEHGT.....	ADR.....	YDVLALAKHN.....		IRGGP
Q53NL5_O._sativa	GIDFFIDQGG.....	ADH.....	YDDLARRLDGYN.....	KYYRGRV	
Chi18_19_H._jecorina	GLDLVVEEE.....	MSLGG.....	VVKLIDRLRSDF.....	G.....	
Chi18_20_H._jecorina	GMDLDVEQP.....	MSQQG.....	IDRLIARLRADF.....	G.....	
01393_N._crassa_B	GLDLVVEEE.....	MSLAG.....	VIIYLIDRLRSDF.....	G.....	
08394_N._crassa_B	GLDIDVEQP.....	MSQGG.....	IERLILRLRADF.....	G.....	
XP_386145_G._zeae_B	GLDLVVEEV.....	MSLGG.....	IVRLIDRLRSDF.....	G.....	
XP_382346_G._zeae_B	GLDLDIEEA.....	MSLGG.....	VIRLIDHLKTD.....	G.....	
MGG_04073_M._grisea	GLDLVVEEP.....	MSLQG.....	IVRLIDRLRADF.....	G.....	
MGG_01876_M._grisea	GLDLDVEEP.....	MSLRG.....	AVRLVRLREDF.....	G.....	
01513_S._sclerotioru	GLDLDVEEE.....	MTLAG.....	IIRLIDRLKADF.....	G.....	
03420_S._sclerotioru	GIDIDVEQF.....	VDITV.....	ALRLIKQLYKDM.....	G.....	
05559_B._fuckeliana	GLDLVVEEE.....	MTLAG.....	IIRLIDRLKADF.....	G.....	
07854_B._fuckeliana	GIDIDVEQF.....	VDITV.....	ALRLIKQLYTDM.....	G.....	
06595_C._immitis_B	GLDLVVEED.....	MSLDG.....	IIRLIDRLKSDF.....	G.....	
AN8245_E._nidulans_B	GIDLDVEEP.....	MSLAG.....	IVRLIDRLKADL.....	G.....	
236861_L._bicolor_B	GFDLDIEEP.....	DSLAN.....	IVKLIQKLRSDF.....	G.....	
185397_L._bicolor_B	GFDLDIEET.....	DSLND.....	VVKLIQQLRSDF.....	G.....	
UM02758_U._maydis_B	GVVDVYEEM.....	ELFAQGK.....	SSEWLIELTRSLRNQL.....	PS.....	
02351_F._neoformans	GVDDIDYEDM.....	SAMNSAR.....	AVSWIVELQVELRNLL.....	PS.....	
Chi18_18_H._jecorina	GFDFDIEADFP.....	NGP.....	YIKMIETFRSLD.....	S...	S..
ZP_01159542_Photobac	GLDIDLESG.....	SNLLHG.....	TEIQARLPVALKQIEANI.....	G.....	
ZP_01234779_V._angus	GLDIDLESG.....	SNLLHG.....	TEIQARLPVALKQIEANI.....	G.....	
NP_231586_V._cholera	GLDLDLESG.....	SNLVHG.....	SQIQARLGRLKQIEKNI.....	G.....	
AAO10239_V._vulnific	GLDLDLESG.....	SNLVHG.....	SQIQARLGRLKQIEQNI.....	G.....	

NP\_902605\_C\_violace GIDLDLESG.....SGIVVG.APVVSNLVSAVKQLKAKI.....G.....  
NP\_980050\_B\_cereus GIDLDLESG.IYLNNGN...DTNFKNPPTTPQIVNLI SAIRTISDHY.....G.....  
634143\_M\_xanthus GLDLDLEGGSSLSLNGG...DTDFRNPTTPRIVNIIQATRQLLNQN.....G.....  
ChiA\_S\_coelicolor GVDIDLENG.....LNP.T....YMTQALRALSAKA.....G.....  
YP\_527176.1\_S\_degra GVDIDLESG.....SOLLHG.SQIQARLITSRLTIDANV.....G.....  
YP\_436543\_B\_H\_cheju GLDIDFEGHSLYLNSG...DNDFRNPPTTPVIVNLI AALKELKAKY.....G.....  
ChiB\_S\_coelicolor GLDIDFEGHSLSLNAD...DTDFKNPKTPVIVNLS AVKTLKAKY.....G.....  
YP\_432187\_H\_chejue GFDIDLEGGSSLSLDAG...DTDFKNPKSPVLTH LISASKRIISNF.....G.....  
ZP\_01353924\_C\_phyto GVDIDLENG.....INA.T....YMTSALRQLSTKA.....G.....  
ZP\_00742457\_B\_thuri GIDIDLESG.IYLNNGN...DTNFKNPPTTPQIVNLI SAIRTISDHY.....G.....  
ZP\_01430879\_S\_tropi GVDIDLENG.....LNP.T....YMAQALRSRLAQV.....G.....  
ChiJ\_S\_coelicolor GIDIDIETGLTG.....SGNINQLSASQSNLIRI IDGVLARM.....P.....  
Chi18\_15\_H\_jecorina GLDIDIETGLTG.....SGSVGTLSQSANLIRI IDGILAQM.....P.....  
YP\_349297\_P\_fluores GIDIDLEQS.....AIDFAANKTVLPAALKLV KDHYAGQ.....G.....  
NP\_719615\_S\_oneiden GLDIDLEQA.....AVTAADNQIVIPAALRIVK DHYRKQ.....Q.....  
ZP\_01236292\_V\_angus GLDIDLEQA.....AIDAADNQTVIPAALRMVK DHYRAQ.....G.....  
ChiC\_S\_marcescens GLDIDLEQA.....AIGAANNKTVLPAALKKVK DYYAAQ.....G.....  
YP\_237842\_P\_syringa GLDIDLEQA.....AITFADNRTVLP AALRMVREHYETE.....G.....  
YP\_608169\_P\_entomop GLDIDLEQS.....AIDFAANKTVLPAALKLV KDHYAAE.....G.....  
NP\_814153\_E\_faecali GLDIDLEQL.....AITAGDNQTVIPATL KIVKDHYRAQ.....G.....  
YP\_014504\_L\_monocyt GLDIDLEQS.....AITAGDNKTVIPAALKIVK DHYKAE.....G.....  
YP\_071855\_Y\_pseudot GLDIDLEQA.....AISYKENSTVIPRALKTV KDYYANL.....G.....  
YP\_053588\_M\_florum GLDIDWESE.....SLKSSSEKNVTA EALKELKDEYKSE.....G.....  
NP\_471330\_L\_innocua GLDIDLEQS.....AITAGDNKTVIPAALKIVK DHYKAE.....G.....  
ZP\_01245639\_B\_F\_joh GVDIDFEGGSMNFNAGGLRDISYAGISAY PRLKNVVD AFKELKAYY.....G.....

	250	260	270	280	290	300
05455_B_fuckeliana	.... .... .... .... .... .... .... .... .... .... .... ....	TKT.WL	LSAAPQC	CPYP		
14944_B_fuckeliana		SKK.YY	LTAAPQC	CPYP		
13155_S_sclerotioru		SKK.YF	ISGAPQC	PLP		
08695_S_sclerotioru		SKK.YY	LTAAPQC	CPYP		
11212_S_sclerotioru		SRT.WL	LSAAPQC	CPYP		
EAA72615_G_zeae		LT	ITGAPQC	PTS		
02184_N_crassa		E.LL	LTAAPGC	SLD		
04500_N_crassa		ATSGKK.FL	LSSAPQC	PFP		
MGG_03599_M_grisea		GRRKIRL	LTASPQC	CVVP		
MGG_01333_M_grisea	RPAAVLPSDDKSYP	MVPSPEATKK.FY	LAAAPQC	CVFP		
16099_R_oryzae		SKE.YY	IAAAPQC	PFP		
10112_R_oryzae		SKK.YY	ITGAPQC	PFP		
04523_R_oryzae		GH.FL	IGAAPQC	PFP		
11152_R_oryzae		QD.FL	IGAAPQC	PFP		
08153_R_oryzae		SKK.YY	ITAAPQC	CVFP		
NP_594130_S_pombe		RRK.YY	ISAAPT	CMVP		
00864_P_nodorum		FL	ITAAPQC	CEVP		
08680_P_nodorum	AG	GKK.FY	FSAAP	ECTQ		
AN8241_E_nidulans		DQT.FY	ISAAPQC	SIP		
AN8217_E_nidulans		SKK.YY	LTAAPQC	PYP		
Chi18_14_H_jecorina		SRQ.YV	ISGAPQC	PLP		
Chi18_16_H_jecorina		KNT.YY	ITGAPQC	PIP		
Chi18_12_H_jecorina		NKK.FY	LAAAPQC	FFP		
Chi18_17_H_jecorina		SKK.FY	LSAAPQC	PYP		
Chi18_13_H_jecorina		SKK.YY	LTAAPQC	PFP		
04407.1_C_cinereus		GKK.YY	VTAPQC	CVYP		
6412_P_chrysosporiu		SKK.YY	ITGAPQC	CVYP		
2991_P_chrysosporiu		SKK.YY	ITGAPQC	PFP		
40899_P_chrysospori		GKK.YI	ITAAPQC	PYP		
BAA21861.1_A_thalia		GRK.IY	LTGAPQC	PFP		
07348_C_immitis		SKK.YF	LTVAPQC	PYP		
XP_452410_K_lactis		KD.YY	LAAAPQC	CVYP		
CTS1_S_cerevisiae		KQ.YY	LSAAPQC	PYP		
CHT1_C_albicans		TKS.YY	LSAAPQC	PYP		

CHT3_C._albicans	.....SKN..YY.....LGAAPQCPYP.....
CHT2_C._albicans	.....SKN..YF.....LSAAPQCPYP.....
05283_L._elongisporu	.....SKL..YY.....LGAAPQCVYP.....
03890_L._elongisporu	.....SKS..YY.....LSAAPQCPYP.....
301747_L._bicolor	.....DKR..YY.....ITAAPQCTSL.....
CAC07216_M._anisopli	.....ANT..YY.....ITGAPQCPYP.....
Chit30_M._anisopliae	.....SKK..YY.....ITAAPQCPYP.....
AAG25709_M._domestic	.....GKK..VY.....LTAAPQCPFP.....
ABA26457_C._lanatus	.....Q..VL.....LSAAPQCPYP.....
CAJ43737_C._arabica	.....ERK..VY.....LSAAPQCPFP.....
ConcanavalinB_C._ens	.....QST..FL.....LSAAPGCLSP.....
Hevamine_H._brasili	.....GKK..VY.....LTAAPQCPFP.....
Q8L5C6_T._aestivum	.....GKP..LH.....LTATVRCGYPP.....
Q53NL5_O._sativa	.....G...VL.....LTATTRCSYP.....
Chi18_19_H._jecorina	.....KG..FL.....ITLAPVAAALL.....
Chi18_20_H._jecorina	.....PD..FL.....ITLAPVASALE.....
01393_N._crassa_B	.....PD..FL.....ITLAPVAAAML.....
08394_N._crassa_B	.....KD..FI.....ITLAPVASALT.....
XP_386145_G._zeae_B	.....PT..FI.....ITLAPVAMSLI.....
XP_382346_G._zeae_B	.....QS..FL.....VTLAPVAPALR.....
MGG_04073_M._grisea	.....PD..FI.....ITLAPVATALL.....
MGG_01876_M._grisea	.....PD..FV.....LTQAPVGTALS.....
01513_S._sclerotioru	.....SG..FI.....ITLAPVAAALI.....
03420_S._sclerotioru	.....LG..FD.....ITMAPVASALS.....
05559_B._fuckeliana	.....AG..FI.....ITLAPVAAALV.....
07854_B._fuckeliana	.....PD..FD.....ITMAPVASALY.....
06595_C._immitis_B	.....DE..FI.....ITLAPVATAMV.....
AN8245_E._nidulans_B	.....ER..FI.....ITLAPVAAALL.....
236861_L._bicolor_B	.....ED..FI.....ITLAPVASALK.....
185397_L._bicolor_B	.....ED..FI.....ITLAPVASALK.....
UM02758_U._maydis_B	.....PD..YI.....ITHAPVAPWFN.....
02351_F._neoformans	.....P...YI.....ISHAPVAPWFT.....
Chi18_18_H._jecorina	.....ML.....ITGAPQCPTN.....
ZP_01159542_Photobac	.....GD..MY.....LTMAPEHPYVQGGMIAYS.....
ZP_01234779_V._angus	.....GD..MY.....LTMAPEHPYVQGGMIAYS.....
NP_231586_V._cholera	.....GD..MF.....LTMAPEHPYVQGGMVAYS.....
AAO10239_V._vulnific	.....GD..MY.....LTMAPEHPYVQGGMVAYS.....
NP_902605_C._violace	.....PN..FY.....LSMAPEHPYVQGGFVAYG.....
NP_980050_B._cereus	.....PD..FL.....LSMAPETAYVQGGYSAYG.....
634143_M._xanthus	.....PG..FI.....LTMAPEETAYVQGGMAAYG.....
ChiA_S._coelicolor	.....PD..MI.....LTMAPQTIDMQS..TQGG.....
YP_527176.1_S._degra	.....G...MV.....LTMAPEHPYVQGGYIAYS.....
YP_436543_B_H._cheju	.....AG..FV.....LTMAPEETFFVQNGYSFYGS.....
ChiB_S._coelicolor	.....DG..FV.....LTMAPEETFFVQLGYQYYGT.....
YP_432187_H._chejuen	.....GN..LM.....LTMAPEETYYYVQGGFSAYG.....
ZP_01353924_C._phyto	.....SG..LI.....ITMAPQTLDMQS..VNSG.....
ZP_00742457_B._thuri	.....PD..FL.....LSMAPETAYVQGGYSAYG.....
ZP_01430879_S._tropi	.....AE..LI.....IAMAPQTIDMQN..PTTS.....
ChiJ_S._coelicolor	.....SN..FG.....LTMAPEETAYVTGGSIVYG.....
Chi18_15_H._jecorina	.....SN..FG.....LTMAPEETAYVTGGSIVYG.....
YP_349297_P._fluores	.....KH..FI.....ISMAPEFFPYLT.....
NP_719615_S._oneiden	.....KN..FL.....ITMAPEFFPYLT.....
ZP_01236292_V._angus	.....KN..FL.....ITMAPEFFPYLT.....
ChiC_S._marcescens	.....KN..FI.....ISMAPEFFPYLR.....
YP_237842_P._syringa	.....KH..FI.....ISMAPEFFPYLRSAARDTPLLKETT.....
YP_608169_P._entomop	.....KH..FI.....ISMAPEFFPYLT.....
NP_814153_E._faecali	.....KN..FI.....ITMAPEFFPYLK.....
YP_014504_L._monocyt	.....KN..FL.....ITMAPEFFPYLK.....
YP_071855_Y._pseudot	.....QH..FI.....ISMAPEFFPYLR.....
YP_053588_M._florum	.....KD..FI.....ITMAPEFFPYLR.....
NP_471330_L._innocua	.....KN..FL.....ITMAPEFFPYLK.....
ZP_01245639_B_F._joh	.....PG..FL.....LTAAPETQYVQGGYTTYT.....



	310	320	330	340	350	360	
05455_B._fuckeliana	D	A	ADGPMLDG	TVA	FD	IVWVQF	
14944_B._fuckeliana	D	Q	ADKSFLQG	AVS	FD	AVFVQF	
13155_S._sclerotioru	E	P	NMGAMIAG	AKFD		LLWIQF	
08695_S._sclerotioru	D	Q	ADKSFLQG	EVS	FD	AVFVQF	
11212_S._sclerotioru	D	A	ADGPMLENG	AVS	FD	IVWVQF	
EAA72615_G._zeae	D		EYFYMKDMIKS	AKFD		ALFVQF	
02184_N._crassa	D		VKMKAIKFDN	AQFD		ALFIQF	
04500_N._crassa	D	R	ANNDLLQS	VA	FD	FVSVQF	
MGG_03599_M._grisea	D	S	NLSDVIRA	VRFD		ALFIQF	
MGG_01333_M._grisea	D	A	AMDAALSSD	VA	FD	FIMVQF	
16099_R._oryzae	D	F	FLGETLDS	SWFD		FIMIQF	
10112_R._oryzae	D	A	MLGPALDA	SE	FD	AVFVQF	
04523_R._oryzae	D	A	ILGSVIDA	VG	LD	FVNVQF	
11152_R._oryzae	D	A	LLGPVIDA	VG	LD	YVNVQF	
08153_R._oryzae	D	A	NLQATLNS	FS	FD	AIYVQF	
NP_594130_S._pombe	D	H	TLTKAISE	NS	FD	FLSIHT	
00864_P._nodorum	D		IRLFDAIKN	AHFD		MIETQF	
08680_P._nodorum			KNSLLSS	IK	YD	MVFVQF	
AN8241_E._nidulans	D	E	QLSVAIKN	AVID		FVWVQF	
AN8217_E._nidulans	D	A	AGKDILNTNSSAA	ID		AVFVQF	
Chi18_14_H._jecorina	E	P	NMGVIIQN	AQFD		YLWVQF	
Chi18_16_H._jecorina	E	P	NMGEIIST	SQFD		YLWVQF	
Chi18_12_H._jecorina	D	A	AVGPLIN	AVP	MD	WIQIQF	
Chi18_17_H._jecorina	D	V	SDESFLDG	QVP	FD	WVNVQF	
Chi18_13_H._jecorina	D	A	SEPLNV	CQLAD		YIWWQF	
04407.1_C._cinereus	D	A	ALGEVLNQ	VA	FD	AVYVQF	
6412_P._chrysosporiu	D	A	SLGGVLNA	AK	FD	AIYVQF	
2991_P._chrysosporiu	D	A	YLGNVINS	VG	FD	AVYVQF	
40899_P._chrysospori	D	A	YIGAALNQ	AD	FD	AVYVQF	
BAA21861.1_A._thalia	D	R	LMGSALNT	KRFD		YVWIQF	
07348_C._immitis	D	L	YNKEMLEG	KVD	FD	AVFVQF	
XP_452410_K._lactis	D	A	SVGDALAN	AD	ID	IAFVQF	
CTS1_S._cerevisiae	D	A	SVGDLEN	AD	ID	FAFIQF	
CHT1_C._albicans	D	E	SVGDLMSQ	VD	LD	FAFIQF	
CHT3_C._albicans	D	A	SVGPLLKQ	SE	ID	FVFIQF	
CHT2_C._albicans	D	A	SLGDLISK	VP	LD	FAFIQF	
05283_L._elongisporu	D	A	SVGDLLDE	SY	ID	FVFIQF	
03890_L._elongisporu	D	A	LLDDLNFQ	VS	LD	YAFIQF	
301747_L._bicolor	D	S	AWSGLLNS	TS	FD	AIYVQF	
CAC07216_M._anisopli	E	P	NMGVIISN	SVFD		HLVYVQF	
Chit30_M._anisopliae	D	Q	SEPLDV	CQLLD		WVQVQF	
AAG25709_M._domestic	D	A	YVGNAKLT	GLFD		NVWVQF	
ABA26457_C._lanatus	D	A	HLDAAIKT	GLFD		FVWVQF	
CAJ43737_C._arabica	D	Y	YLDVAIRT	GLFD		FVWVQF	
ConcanavalinB_C._ens	D	E	YLDNAIQT	RHFD		YIFVRF	
Hevamine_H._brasilie	D	R	YLGTALNT	GLFD		YVWVQF	
Q8L5C6_T._aestivum	A	A	HVGRALAT	GIFE		RVHVRT	
Q53NL5_O._sativa	D	H	RLEKALAT	GVFA		RIHVVRM	
Chi18_19_H._jecorina		D	HRSNLSGF	D	YE	ALEVMR	
Chi18_20_H._jecorina		DS	SNLSGF	S	YT	ALQQTQ	
01393_N._crassa_B		N	PRHNLSGF	D	YE	ALEVMR	
08394_N._crassa_B		MGG	WNLSGF	D	YR	KLMLAP	
XP_386145_G._zeae_B		D	FRRNLSGF	D	YE	ALEVMR	
XP_382346_G._zeae_B		N	EQNLGGF	N	ME	ELEKGL	
MGG_04073_M._grisea			GDDDPNRNLSGF	G	YD	ALHAER	
MGG_01876_M._grisea			RGG	APNLSGF	S	YR	DLDQAV
01513_S._sclerotioru			SER	PEHNLSGF	N	YE	ALEVMR
03420_S._sclerotioru			YG	GSLSGF	S	YS	DLDQAQ
05559_B._fuckeliana			SDL	PKHNLSGF	N	YE	ALEVMR

07854_B._fuckeliana	.....HG.....GSLSGF.....S.YS.....DLDAQA
06595_C._immitis_B	.....HG.....LRHLSGF.....D.YR.....ALETAR
AN8245_E._nidulans_B	.....G.....IGNLSGF.....D.YR.....LLEQQR
236861_L._bicolor_B	.....GG.....KDPFSGI.....T.YS.....DLEKNY
185397_L._bicolor_B	.....GG.....EDPFSGI.....N.YS.....DLEKNY
UM02758_U._maydis_B	.....AQMYPNG.....YA.....YIHSQV
02351_F._neoformans	.....S.....ANDYSDG.....S.YV.....AIHQVQV
Chi18_18_H._jecorina	.....P.....QYFVMKDMIQQ.....AAFD.....KLFIQF
ZP_01159542_Photobac	.....GIWG.....AYIPMINELRD.....M.LN.....LLHVQL
ZP_01234779_V._angus	.....GIWG.....AYIPMINELRD.....M.LN.....LLHVQL
NP_231586_V._cholera	.....GIWG.....AYIPVINEVRD.....T.LD.....ILHVQL
AAO10239_V._vulnific	.....GIWG.....AYIPVINATRS.....T.LD.....LLHVQL
NP_902605_C._violace	.....GNWG.....AYLPIDGLRD.....D.LS.....VIHSQY
NP_980050_B._cereus	.....SIWG.....AYLPPIYGVKD.....K.LT.....YIHVQH
634143_M._xanthus	.....GPWG.....AYLPVIHALRD.....R.LA.....YLVHQB
ChiA_S._coelicolor	.....YFQTALNVKD.....I.LT.....VVMQY
YP_527176.1_S._degra	.....GIWG.....AYLPIDALRD.....Q.LD.....LLHVQL
YP_436543_B_H._cheju	.....GQWGGADPRCGAYLPVIYAMRN.....D.LT.....LLHVQD
ChiB_S._coelicolor	.....GKWGGQDPRAGAYLPVIHALRD.....D.LT.....LLHVQD
YP_432187_H._chejuen	.....GSGS.....AYLPVIHALRN.....E.LS.....FHVQB
ZP_01353924_C._phyto	.....YFQVALNIKD.....I.LT.....VVNTQY
ZP_00742457_B._thuri	.....SIWG.....AYLPPIYGVKD.....K.LT.....YIHVQB
ZP_01430879_S._tropi	.....YFKLALDIQD.....I.LT.....VVNTQF
ChiJ_S._coelicolor	.....SIWG.....AYLPPIKKYAENG.....R.LW.....WVNMQY
Chi18_15_H._jecorina	.....SIWG.....AYLPPIKKYVDNG.....R.LW.....WVNMQY
YP_349297_P._fluores	.....TSG.....KYVGYLQALEGY.....YD.....FIAPQF
NP_719615_S._oneiden	.....TGG.....KYVPYINALEGY.....YD.....WINPQF
ZP_01236292_V._angus	.....ESG.....KYIPYITGLEGY.....YD.....WINPQF
ChiC_S._marcescens	.....TNG.....TYLDYINALEGY.....YD.....FIAPQY
YP_237842_P._syringa	YFPFLKEAVAFLTFSRSGG.....AYLAYIEALEDL.....YD.....FIAPQY
YP_608169_P._entomop	.....AAG.....RYVPYLKALEGY.....YD.....FIAPQF
NP_814153_E._faecali	.....PGA.....AYETYITSLNGY.....YD.....YIAPQL
YP_014504_L._monocyt	.....PGS.....AYESYLTSNLANY.....YD.....YIAPQL
YP_071855_Y._pseudot	.....INE.....AYVPYIKALEGY.....YD.....FIAPQY
YP_053588_M._florum	.....KIKEADG.....NYKEFLDGLDGY.....YD.....WINPQF
NP_471330_L._innocua	.....PGS.....AYESYLTSNLANY.....YD.....YIAPQL
ZP_01245639_B_F._joh	.....DTFG.....SFLPIIQNLRN.....E.LD.....LLAVQL

370 380 390 400 410 420

05455_B._fuckeliana	YNN.....
14944_B._fuckeliana	YNN.....
13155_S._sclerotioru	YNN.....
08695_S._sclerotioru	YNN.....
11212_S._sclerotioru	YNN.....
EAA72615_G._zeae	YNN.....
02184_N._crassa	YNN.....
04500_N._crassa	YNN.....
MGG_03599_M._grisea	YNT.....
MGG_01333_M._grisea	YNN.....
16099_R._oryzae	YNN.....
10112_R._oryzae	YNN.....
04523_R._oryzae	YNN.....
11152_R._oryzae	YNN.....
08153_R._oryzae	YNN.....
NP_594130_S._pombe	FNSS.....
00864_P._nodorum	YNT.....
08680_P._nodorum	YNN.....
AN8241_E._nidulans	YNT.....
AN8217_E._nidulans	YNN.....
Chi18_14_H._jecorina	YNN.....
Chi18_16_H._jecorina	YNN.....

Chi18_12_H._jecorina	YNN.....
Chi18_17_H._jecorina	YNN.....
Chi18_13_H._jecorina	YNN.....
04407.1_C._cinereus	YNN.....
6412_P._chrysosporiu	YNN.....
2991_P._chrysosporiu	YNN.....
40899_P._chrysospori	YNN.....
BAA21861.1_A._thalia	YNN.....
07348_C._immitis	YNN.....
XP_452410_K._lactis	YNN.....
CTS1_S._cerevisiae	YNN.....
CHT1_C._albicans	YNN.....
CHT3_C._albicans	YNN.....
CHT2_C._albicans	YNN.....
05283_L._elongisporu	YNN.....
03890_L._elongisporu	YNN.....
301747_L._bicolor	YNN.....
CAC07216_M._anisopli	YNN.....
Chit30_M._anisopliae	YNN.....
AAG25709_M._domestic	YNN.....
ABA26457_C._lanatus	YNN.....
CAJ43737_C._arabica	YNN.....
ConcanaValinB_C._ens	YND.....
Hevamine_H._brasilie	YNN.....
Q8L5C6_T._aestivum	YES.....
Q53NL5_O._sativa	FGD.....
Chi18_19_H._jecorina	.....GHEIAWYN.....
Chi18_20_H._jecorina	.....GNDIDWYN.....
01393_N._crassa_B	.....GQETIAWYN.....
08394_N._crassa_B	SGA.....GKEVAFYN.....
XP_386145_G._zeae_B	.....GRDIAWYN.....
XP_382346_G._zeae_B	.....GSRIAWYN.....
MGG_04073_M._grisea	.....GHEIAWYN.....
MGG_01876_M._grisea	.....GGSIEFYN.....
01513_S._sclerotioru	.....GNSIEWYN.....
03420_S._sclerotioru	RDPNTGAPMISFYN.....
05559_B._fuckeliana	.....GSSIDWYN.....
07854_B._fuckeliana	RDPDTGTPMISFYN.....
06595_C._immitis_B	.....GSKISWYN.....
AN8245_E._nidulans_B	.....AGSIAWYN.....
236861_L._bicolor_B	.....GDSIDWYN.....
185397_L._bicolor_B	.....GDAIDWYN.....
UM02758_U._maydis_B	.....GDLIDWYN.....
02351_F._neoformans	.....GDTIDFYS.....
Chi18_18_H._jecorina	YNN.....
ZP_01159542_Photobac	YNN...GGLANPYTSG.....VAPEGSVDMMVASVKMLVEGFELADGSQ...FSPLR
ZP_01234779_V._angus	YNN...GGLANPYTSG.....VAPEGSVDMMVASVKMLVEGFELADGSQ...FAPLR
NP_231586_V._cholera	YNN...GGLPNPYTPS.....AAPEGSVDMMVAQSKMLIEGFELANGTR...FEPLR
AAO10239_V._vulnific	YNN...GGLPNPYLPG.....AAPEGSVDMMVAQSKMLIEGFELADGTR...FEPLR
NP_902605_C._violace	YNN...GGLYTPYSTG.....VLAEGSADMLVGGSKMLIEGFPIANGASGSFKGLR
NP_980050_B._cereus	YNA...GSGIGMDGN.....NYNQGTADYEVAMADMLLHGFPVGGNANNMFPALR
634143_M._xanthus	YNT...GTVMALDGR.....AYAQSTPDFHVAMAEMLLQGFVGGNTGAMFPGLR
ChiA_S._coelicolor	YNS...GTMLGCDGK.....VYAQGTVDFLTALACIQLE.....G...GLA
YP_527176.1_S._degra	YNN...GGILSPYNPQ.....TFPAGSVDMMVASARMLIEGFNTGDGGY...FQGLR
YP_436543_B_H._cheju	YNS...GPIVGLDDQ.....YHTMGTADFHVAMTDMLLAGFPVQKDPNMMFPALK
ChiB_S._coelicolor	YNS...GSIMGLDNQ.....YHSMGGADFHIAMTDMLLTGFPVAGDANNVFPPLR
YP_432187_H._chejuen	YNS...GCMLGLDGK.....CYSVSTGDFHVAMAEMLLAGFPVGGNANNRFPPLP
ZP_01353924_C._phyto	YNS...GSMLGQDGK.....VYSQGSVDFTALAAIQLE.....N...GLR
ZP_00742457_B._thuri	YNA...GSGIGMDGN.....NYNQGTADYEVAMADMLLHGFPVGGNANNIFPALR
ZP_01430879_S._tropi	YNS...GAMLGCDQQF.....AYSQGTVNFIVALACIQLE.....A...GLR
ChiJ_S._coelicolor	YN....GSMYGCAGD.....SYSAGTVQGFTAQTDCLDKGLVIQG.TT...VRVP
Chi18_15_H._jecorina	YN....GDMYGCAGD.....SYAAGTVAGFIAQTDCLNNGLTIQG.TT...FKVP

YP\_349297\_P.\_fluores YNQGGDGVVWPEANNNGA.....WIAQNNDTMKEDFLYYLTESLVT...GTRGFTKIP  
 NP\_719615\_S.\_oneiden YNQGGDGIYIEGIG.....WIAQNNDSLKQEFYIHISDALVN...GTNGFTKIP  
 ZP\_01236292\_V.\_angus YNQGGDGVVYEGIG.....WIAQSKDELKEEFYYMSDSLIN...GTRGFTKIP  
 ChiC\_S.\_marcescens YNQGGDGIWVDELN....A.....WITQNNDAMKEDFLYYLTESLVT...GTRGYAKIP  
 YP\_237842\_P.\_syringa YNQGGDGIWVDELN....L.....WVTQNNDAAHKEFLYYLTDSLH...GTRGFTKIP  
 YP\_608169\_P.\_entomop YNQGGDGLWVEEANNRGA.....WIAQNNDAMKEDFLYYMTESLVS...GTRGFTKIP  
 NP\_814153\_E.\_faecali YNQGGDGVWVDEIM....T.....WVAQSNDAKLYEFYYMSDSLH...GTRGYLQIP  
 YP\_014504\_L.\_monocyt YNQGGDGVWVDETN....Q.....WIAQNNDTLKESFLYYMADSFIN...GTRGYLKIP  
 YP\_071855\_Y.\_pseudot YNQLGDGVHTDSGE.....FIAQSDNERKEDFLYYLTKNLVS...SSQKFINIP  
 YP\_053588\_M.\_florum YNGWGDGVLVETSEDAKKTGVQQNTYITNDNVDKRGEFYLLMSKYITSKPNNQNGFYQIP  
 NP\_471330\_L.\_innocua YNQGGDGVWVDETN....Q.....WIAQNNDTLKESFLYYMADSFIN...GTRGYLKIP  
 ZP\_01245639\_B\_F.\_joh YNT...GGENGLDGQY.....YGTAKKSNMVTALTDMVIKGYNIAS.TGMRFDGLP

	430	440	450	460	470	480
05455_B._fuckeliana	.... .... .... .... .... .... .... .... .... .... .... ....					
14944_B._fuckeliana	.....					
13155_S._sclerotioru	.....					
08695_S._sclerotioru	.....					
11212_S._sclerotioru	.....					
EAA72615_G._zeae	.....					
02184_N._crassa	.....					
04500_N._crassa	.....					
MGG_03599_M._grisea	.....					
MGG_01333_M._grisea	.....					
16099_R._oryzae	.....					
10112_R._oryzae	.....					
04523_R._oryzae	.....					
11152_R._oryzae	.....					
08153_R._oryzae	.....					
NP_594130_S._pombe	.....					
00864_P._nodorum	.....					
08680_P._nodorum	.....					
AN8241_E._nidulans	.....					
AN8217_E._nidulans	.....					
Chi18_14_H._jecorina	.....					
Chi18_16_H._jecorina	.....					
Chi18_12_H._jecorina	.....					
Chi18_17_H._jecorina	.....					
Chi18_13_H._jecorina	.....					
04407.1_C._cinereus	.....					
6412_P._chrysosporiu	.....					
2991_P._chrysosporiu	.....					
40899_P._chrysospori	.....					
BAA21861.1_A._thalia	.....					
07348_C._immitis	.....					
XP_452410_K._lactis	.....					
CTS1_S._cerevisiae	.....					
CHT1_C._albicans	.....					
CHT3_C._albicans	.....					
CHT2_C._albicans	.....					
05283_L._elongisporu	.....					
03890_L._elongisporu	.....					
301747_L._bicolor	.....					
CAC07216_M._anisopli	.....					
Chit30_M._anisopliae	.....					
AAG25709_M._domestic	.....					
ABA26457_C._lanatus	.....					
CAJ43737_C._arabica	.....					
ConcanaValinB_C._ens	.....					
Hevamine_H._brasilie	.....					
Q8L5C6_T._aestivum	.....					



Q53NL5\_O.\_sativa .....  
Chi18\_19\_H.\_jecorina .AQFYCG.....  
Chi18\_20\_H.\_jecorina .TQFYSG.....  
01393\_N.\_crassa\_B .TQFYCG.....  
08394\_N.\_crassa\_B .CQFYSG.....  
XP\_386145\_G.\_zeae\_B .TQFYCG.....  
XP\_382346\_G.\_zeae\_B .TQFYCG.....  
MGG\_04073\_M.\_grisea .TQFYCG.....  
MGG\_01876\_M.\_grisea .AQFYNG.....  
01513\_S.\_sclerotioru .TQFYCG.....  
03420\_S.\_sclerotioru .AQFTNG.....  
05559\_B.\_fuckeliana .TQFYCG.....  
07854\_B.\_fuckeliana .AQFTNG.....  
06595\_C.\_immitis\_B .VQFYNG.....  
AN8245\_E.\_nidulans\_B .TQFYNG.....  
236861\_L.\_bicolor\_B .TQFYSG.....  
185397\_L.\_bicolor\_B .AQFYSG.....  
UM02758\_U.\_maydis\_B .VQFYNQ.....  
02351\_F.\_neoformans .VQFYNQ.....  
Chi18\_18\_H.\_jecorina .....  
ZP\_01159542\_Photobac DDQVAIGLPSGSSSAN.SGQAPTQNIIDALDCVTKGSSCG..SVVPTK..LYPNFGGVMT  
ZP\_01234779\_V.\_angus DDQVAIGLPSGPSSAN.SGQAPTQNIIDALDCVTKGSSCG..SVVPTK..LYPNFGGIMT  
NP\_231586\_V.\_cholera DDQVAIGLPSGPSSAN.SGQAPTQNIIDALDCVTKGTRCG..TIKPAF..AYPNYAGVMT  
AAO10239\_V.\_vulnific DDQVAIGLPSGPSSAN.SGQAPTQNIIDALDCLTLGTKCS..TVKPAF..NYPNFGGVT  
NP\_902605\_C.\_violace PDQVAFGVPSGRSSAN.SGFVTADTVAKALTCLTTLQCG..SVKPAQ..AYPAFRGVT  
NP\_980050\_B.\_cereus SDQVMIGLPAAPAAAPS.GGYISPTMKKALDYIIKGIPFGG.KYKLSNESGYPAFRGLMS  
634143\_M.\_xanthus PDQVLIIGLPSPPQAAG.GGYTTPANVHKALDYLLKGQSFSGG.TYVLRNPAGYPGFKGLMT  
ChiA\_S.\_coelicolor PSQVGLGLPASTRAAG.GGYVSPSVVNAALDCLTKATNCG..SFKPSK..TYPDLRGAMT  
YP\_527176.1\_S.\_degra PDQVSLGLPSGPSSAG.SGLATNQAIMDALDCITRGTHCG..TIDAGG..IYPSFNGVMT  
YP\_436543\_B\_H.\_cheju QSQIAIGLPAASNAGG..GFTSVQDVQTDALDCLMKKENC..TYQPKG..VYPNMRGLMT  
ChiB\_S.\_coelicolor PDQVAIGMPASTQAGN..GHVSPAETVKALNCLTKKTDG..SYATHG..TWPDLRGLMT  
YP\_432187\_H.\_chejuen AEKVAIGLPASTSAAG.SGYTLPSVVHQAVNYLVKGQSFSGG.SYQLQNPGEYPGFKGLMT  
ZP\_01353924\_C.\_phyto PDQVGLGLPASTKGAG.SGYVAPSVVNAALDCLTKGTNGG..SYKPPK..TYPTLRGAMT  
ZP\_00742457\_B.\_thuri SDQVIIIGLPAAPAAAPS.GGYISPTMKKALDYIIKGIPFGG.KYKLSNQSGYPAFRGLMS  
ZP\_01430879\_S.\_tropi PDQVGLGLPAGPGAAG.GGIVAPSVVNAALDCLTRGTSCG..SFQPPR..TYSGLRGAMT  
ChiJ\_S.\_coelicolor YDKQVPGLPAQPGAGG..GYMSPSPVSQAWNHYN.....G.....ALKGLMT  
Chi18\_15\_H.\_jecorina YSMQVPGLPAQSGAGG..GYMSPSLVGQAWDHYN.....G.....ALKGLMT  
YP\_349297\_P.\_fluores ADKFVIGLPAANVDAAATGYVIDKTVVGNAMKRLAVKG.....HPIKGLMT  
NP\_719615\_S.\_oneiden HDKLVFGIPTNIDAAATGYVSDPNALFAAFEQLKNQG.....QPLRGLMT  
ZP\_01236292\_V.\_angus HDKLVFGIPTNIDAAATGYVQDPQDLFNAFKRLEAQS.....QPLRGVMT  
ChiC\_S.\_marcescens AAKFVIGLPSNNDAAATGYVIDKQAVYNFAFRLDAKS.....LSIKGLMT  
YP\_237842\_P.\_syringa ANRLAIGLPTNNDAAATGYVINPDDVKYALDTLQADG.....NPIRGLMT  
YP\_608169\_P.\_entomop ADKFAIGLPAANVDAAATGYVINPTAVSNFAKRLYAKG.....ISIKGLMT  
NP\_814153\_E.\_faecali NDKLVIGLPAANRDAAGSGYVVEATPVAKTFDQLAKDG.....NPIRGLMT  
YP\_014504\_L.\_monocyt ANKFVFGLPAANVDAAATGYVKDPQIVKNVFTRLQAKG.....TPVKGIMT  
YP\_071855\_Y.\_pseudot ADKFVMGLPANNDAAANGYVIDKKDVHNAFARLDAAG.....LSIRGLMT  
YP\_053588\_M.\_florum ADKFIIGASTN.EPAGRG.AGSKEAFNKAYNLLNSDG.....IKIRGLMT  
NP\_471330\_L.\_innocua ANKFVFGLPAANVDAAATGYVKDPQIVQNVFNRLQAKG.....TPVKGVT  
ZP\_01245639\_B\_F.\_joh ASKVLIALPACPSAAG.SGYLTPTEGINAMHYLRTGTTFSGRITYTMQPGGYPSLRGLMT

.....|.  
05455\_B.\_fuckeliana .....  
14944\_B.\_fuckeliana .....  
13155\_S.\_sclerotioru .....  
08695\_S.\_sclerotioru .....  
11212\_S.\_sclerotioru .....  
EAA72615\_G.\_zeae .....  
02184\_N.\_crassa .....  
04500\_N.\_crassa .....  
MGG\_03599\_M.\_grisea .....  
MGG\_01333\_M.\_grisea .....

16099_R._oryzae	.....
10112_R._oryzae	.....
04523_R._oryzae	.....
11152_R._oryzae	.....
08153_R._oryzae	.....
NP_594130_S._pombe	.....
00864_P._nodorum	.....
08680_P._nodorum	.....
AN8241_E._nidulans	.....
AN8217_E._nidulans	.....
Chi18_14_H._jecorina	.....
Chi18_16_H._jecorina	.....
Chi18_12_H._jecorina	.....
Chi18_17_H._jecorina	.....
Chi18_13_H._jecorina	.....
04407.1_C._cinereus	.....
6412_P._chrysosporiu	.....
2991_P._chrysosporiu	.....
40899_P._chrysospori	.....
BAA21861.1_A._thalia	.....
07348_C._immitis	.....
XP_452410_K._lactis	.....
CTS1_S._cerevisiae	.....
CHT1_C._albicans	.....
CHT3_C._albicans	.....
CHT2_C._albicans	.....
05283_L._elongisporu	.....
03890_L._elongisporu	.....
301747_L._bicolor	.....
CAC07216_M._anisopli	.....
Chit30_M._anisopliae	.....
AAG25709_M._domestic	.....
ABA26457_C._lanatus	.....
CAJ43737_C._arabica	.....
ConcanavalinB_C._ens	.....
Hevamine_H._brasilie	.....
Q8L5C6_T._aestivum	.....
Q53NL5_O._sativa	.....
Chi18_19_H._jecorina	.....
Chi18_20_H._jecorina	.....
01393_N._crassa_B	.....
08394_N._crassa_B	.....
XP_386145_G._zeae_B	.....
XP_382346_G._zeae_B	.....
MGG_04073_M._grisea_	.....
MGG_01876_M._grisea_	.....
01513_S._sclerotioru	.....
03420_S._sclerotioru	.....
05559_B._fuckeliana_	.....
07854_B._fuckeliana_	.....
06595_C._immitis_B	.....
AN8245_E._nidulans_B	.....
236861_L._bicolor_B	.....
185397_L._bicolor_B	.....
UM02758_U._maydis_B	.....
02351_F._neoformans_	.....
Chi18_18_H._jecorina	.....
ZP_01159542_Photobac	WSINWD
ZP_01234779_V._angus	WSINWD
NP_231586_V._cholera	WSINWD
AAO10239_V._vulnific	WSINWD
NP_902605_C._violace	WSINWD

NP_980050_B._cereus	WSINWD
634143_M._xanthus	WSINWD
ChiA_S._coelicolor	WSTNWD
YP_527176.1_S._degra	WSINWD
YP_436543_B_H._cheju	WSINWD
ChiB_S._coelicolor	WSINWD
YP_432187_H._chejuen	WSINWD
ZP_01353924_C._phyto	WSINWD
ZP_00742457_B._thuri	WSINWD
ZP_01430879_S._tropi	WSVNWD
ChiJ_S._coelicolor	WSLNWD
Chi18_15_H._jecorina	WSINWD
YP_349297_P._fluores	WSVNWD
NP_719615_S._oneiden	WSVNWD
ZP_01236292_V._angus	WSINWD
ChiC_S._marcescens	WSINWD
YP_237842_P._syringa	WSVNWD
YP_608169_P._entomop	WSVNWD
NP_814153_E._faecali	WSANWD
YP_014504_L._monocyt	WSVNWD
YP_071855_Y._pseudot	WSIDWD
YP_053588_M._florum	WSILFD
NP_471330_L._innocua	WSVNWD
ZP_01245639_B_F._joh	WSVNWD