

Supplementary data 3 Sequence alignment for the homology protein of MoABC-R1.

catrA <i>Botrytis cinerea</i>	-----MFYTHAERMYAERAIEGREGAQIPLHSDNYRGEPIQPHDSSSSSESEIINNDGTWGEHEGGGPVNCSTAMHEYEDLRHQLTHLSKTRSQKSVATARKASAMKRTMTNASRRSRATAGEDIEAQE
BcatrB <i>Botrytis cinerea</i>	-----MAAIEPEGFSSIIVR-----PHEEHGNALTRALSSSSAFSDRKR-----GRAYDSSDEDNKKE
FgABCC15 <i>Fusarium graminearum</i>	-----MAVSGCTNDNSFGPIVQGCGRGDFDFTLRF-----QNIILGILPAAIFILLALTR-----VATLAFRS
FgABCC9 <i>Fusarium graminearum</i>	-----MPDPVDKELQPSDTQAAP-----LAPTNER
FgABCG6 <i>Fusarium graminearum</i>	-----MALPEANMSSTRSEQSSRSHDTIVGNEQPHSEKPAASAPGDMSSDDEEGPQTEEMIRRHISVRDLARNYTNT-----SHHFTGSSADLFNA
FgABC1 <i>Fusarium graminearum</i>	-----MALPEANMSSTRSEQSSRSHDTIVGNEQPHSEKPAASAPGDMSSDDEEGPQTEEMIRRHISVRDLARNYTNT-----SHHFTGSSADLFNA
FcABC1 <i>Fusarium culmorum</i>	-----MALPEANMSSTRSEQSSRSHDTIVGNEQPHSEKPAASAPGDMSSDDEEGPQTEEMIRRHISVRDLARNYTNT-----SHHFGSSADLFNA
AtrB <i>Botryotinia fuckeliana</i>	-----MSTLTVGD TALPRESRETMV-----SIQGIIRIVNYSRR
AtrA <i>Botryotinia fuckeliana</i>	-----MGVPDELPPGSSETDITV-----SSSQPTNRSPMDLISEAESLNLRRIATNQSKAQCRP-----GSAAVPSHDNPPND
Pdr5p <i>Saccharomyces cerevisiae</i>	-----MPEAKLN-----NNVNDVTSYSSASSSTENAAD-----LHNYNGFDEHTEARIQKLARTLTAQSMQNSTQSA PNKSDAQSI FSS-----GVEGVNPIFSDPEA
Snq2p <i>Saccharomyces cerevisiae</i>	-----MSNIKSTQDSSHNAVARSSSASF AASEESFTGITHDKDEQSDTPADKL-----TKMLTGPARDTASQISATVSEMAPDVVS-----KVESFADALSRHTT
Cdr1p <i>Candida albicans</i>	-----MSDSKMSSQDESKLEKASIQDSSSENHS-----INEYHGFDAHTSENIQNLARTFTHDSFKDDSSAGLLKYL T-----HMSEVPGVNPNYEHE
PMR1 <i>Penicillium digitatum</i>	-----MEARRHDPTASVNTEDTAN-----EKSEVGDEKYTDAEVTRLAQQLTRQSTR-----FSVSPQNAENPFI E
ABC1 <i>Magnaporthe oryzae</i>	MSQPVEDPSHDQARNDNAQT TTDGNASMPKTNGH DQESSATG I SSSPADTLM DKEKQAAPTPEPSTEKA AVDPDPAASVASDTAEDEFFDDNDSEQRRRNEMVQQLARTYTSRSNASAA-----ADEYGNANPFLIAS
ABC2 <i>Magnaporthe oryzae</i>	-----MDQKANDVASLEEGNKAPSTANTAVGSLPRSDPSINLEELRVAAHQKNPNGTSNVGSGISVARAEADFAELQRELTGMSRASR-----RKSHASQRDAEKAN
ABC3 <i>Magnaporthe oryzae</i>	-----MTAATPAD
ABC4 <i>Magnaporthe oryzae</i>	-----MAFIRQITLVKK
MoABC5 <i>Magnaporthe oryzae</i>	-----MSVVLGVKTI LLVL-----
CaABC1 <i>Colletotrichum acutatum</i>	-----MSLENEKPVGASEKST-----EVAEKTAS
MoABC7 <i>Magnaporthe oryzae</i>	-----MGGVGQCQWPVWQVDDLTPCF-----QHDYLRILLPAVVI GLSVNLGFRSARHAAS-----RSKSPSTHAYAPVS
MoABC-R1 <i>Magnaporthe oryzae</i>	-----MECPADADRVFGPAIQGCRSDFDFTLLF-----QDSVLGILPSSVLI LAAAR-----LVFLARRH

BcatrA <i>Botrytis cinerea</i>	EEEKLEEAADDEFVLGDFLK--DGHFKEKRNTKGSAKKVGVIYKNLTVQGVGATSTYVKTLPСАIMGTFGPDLYKLLTRFIPALPKPGSNGQRRDLIHDFTGCVRDGE---MLLVLGRPGSGCSTFLKASINKR-GDYAGVTGEVSYG
BcatrB <i>Botrytis cinerea</i>	KSMAADWSLMPEL-----QAMQQQSDKDQAKRRDLGVTWKNLTVKGIGADAAINENVGSQ-----FNIPKLIKEGRTKPLRLTLDNSHGCVKPGE---MLLVLGRPGAGCTLLKMLANTRGG-YAEVTGDVHFQ
FgABCC15 <i>Fusarium graminearum</i>	RIVGGKVLQFTKLAVIAATAALQLVLLILSSTSNDESVDGDTFAVANSALGFSQW-----IVTLALSFAEHSRAPRPSSILTLYL-----LLQIL-----LDVTRCRSYW
FgABCC9 <i>Fusarium graminearum</i>	SGESDE-----DQIKESEEKRSAERRQSEEFNE-----KNESRLADLEEVTGASEAQ-----TISRATSG-----
FgABCG6 <i>Fusarium graminearum</i>	ADANSPLNPSSFNARAWARAMAKTMGENSGF--RQSGLCFQDMNVFGYGAETDYQKDVGNV-----WLGLPDMVHQMISPNANKRRIDILRGFDGVINAGE---MCVVLGPPGSGCSTFLKSISGETNGIYIDISTYFNYN
FgABC1 <i>Fusarium graminearum</i>	ADANSPLNPSSFNARAWARAMAKTMGENSGF--RQSGLCFQDMNVFGYGAETDYQKDVGNV-----WLGLPDMVHQMISPNANKRRIDILRGFDGVINAGE---MCVVLGPPGSGCSTFLKSISGETNGIYIDISTYFNYN
FcABC1 <i>Fusarium culmorum</i>	ADANSPLNPSSFNARAWARAMAKTMGENSGF--RQSGLCFQDMNVFGYGAETDYQKDVGNV-----WLGLPNMVQQMISKPNAGKRRIDILRGFDGVVNAGE---MLVVLGPPGSGCSTFLKSISGETNGIYVDDISTYFNYN
AtrB <i>Botryotinia fuckeliana</i>	GFRFHNKIQMSAVPMAGLLMPQVKEQNEREAESGFKRRELGVTWQNLSVEVVSADAQVEN-----FLSQFNVPKLARESRRNPPLRTILDNSHGCVKPGE---MLLVLGRPGSGCTLLKMLANQRLG-YKAVQGDVRYG
AtrA <i>Botryotinia fuckeliana</i>	DLEDATLDPNSASFLEKWLR--AAVSDASQQGLSTPSGGIPLQKSDRPRAQTAALQLQPTVGS-----VLTAPLRSRVCCDTGEYEPRIILHGFDGVMKTGE---LLLVLGRPGTGCSTFLKAVCGETNGLHIDADSVLHYN
Pdr5p <i>Saccharomyces cerevisiae</i>	PGYDPKLPNSEN-FSSAAWKNMAHLSAADPDFYKPYSLGCAWKNLSASGASADVAYQSTVVNI-----PYKILKSGLRKFQRSKETNTFQILKPMDGCLNPGE---LLVVLGRPGSGCTLLKSISSNTHGFDLGADTKISYS
Snq2p <i>Saccharomyces cerevisiae</i>	RSGAFNMDSDDGFDAAHIFE--SFVRDAEQGIHIRKAGVTIEDVSAKGVDASALEGATFGNI-----LCLPLTIFKGIKAKRHQKMRQISNVNALAEAGE---MILVLGRPGAGCSSFLKVTAGEDQFAGGVSGEYAYD
Cdr1p <i>Candida albicans</i>	EINNDQLNPDSFNAKFWVKNLRKLFESDPEYYKPSKLGIGYRNLRAYGVANDSDYQPTVTNA-----LWKLATEGFRHFQKDDDSRYFDILKSMDAMRPG---LTVVLGRPGAGCSTLLKTI AVNTYGFHIGKESQITYD
PMR1 <i>Penicillium digitatum</i>	THEDSTLNPHSGNFKAKNWMKNLLAIQSRDPERYPKRQAGLAFKNLSVHFGSPTDYQKDVANS-----VLEIGAFFRTMAGTGK--QKIQILRDFDGLVKNGE---MLIVLGRPGSGCSTFLKTIAGEMNGIFKDANSHMNYQ
ABC1 <i>Magnaporthe oryzae</i>	EDPDSPLNPSGNNFKAYAWAKIAGMVAAEGGSF--RTIGICFQNMNVFGGAATDFQKTVSNV-----WLEAANMLRTAVGMGKTTR-IDILRGFNGVVRNGE---MLVVLGPPGSGCSTFLKTIAGETNGLNVDQSAYFNYQ
ABC2 <i>Magnaporthe oryzae</i>	GEDLGETSSSESEPFDESIR--GGIQAEREAGIRPKHIGVYWDELTVKGMSAFTNYVETFPDAVIR-----FFDYITPKNKLGLGGKAPEATLLDSFRGVCKPGE---MVLVLGKPGSGCTTFLKNTNQRYG-YTGVGEDVLYG
ABC3 <i>Magnaporthe oryzae</i>	GEKGFKLNP-----KHLLAIHNFKRIITYGT-----
ABC4 <i>Magnaporthe oryzae</i>	NFLIILWRHSTATVLR AFLLPILAAFLSFARFFVPPARNGVADSLAIRSLGDSLVR-----AGETSRNTVVFVDGGHKTGD-----IDRVINNLTS-QVEDAGKTVFR
MoABC5 <i>Magnaporthe oryzae</i>	-----EAVPKTIIAATIPGTAQNGQ-----
CaABC1 <i>Colletotrichum acutatum</i>	NGHSDRASSHGDS-----TEVDASIQPKN-----QTANITSN
MoABC7 <i>Magnaporthe oryzae</i>	NGDNSRPGAHRTD-----ISPDDDAIAQDDEDDDEGLAIGGGRLAL-----VKATATKGSIVQADTPPAQTLSVVVEELAIAGLVAVYVIALLSPKAHGSYTLTGTIIGLTTWVYVLATLRLF
MoABC-R1 <i>Magnaporthe oryzae</i>	AVASLNWLYHSKIGFNILSFALQLTILVQRQRIQDLETSAAIPWATL--GLAATCAL-----FLLSAVEHRRSARPSILVAYL-----FIFVLTEATRARTYYLKRQTVAAAS--ITANCCVKFV

BcatrA <i>Botrytis cinerea</i>	GISAEEQAKHYRGEVNYNEEDDQHFPSSLTVEQTLDFSLLNKTKKHEKGD I-----PT I I TALLKMFG I SHTRHTLVGDAFVRGVSGGERKRVS I AETLATKSTVVSWDNSTRGLDASTALDYANSLRVMTD I SNRTTLVTLYQAGEQ I
BcatrB <i>Botrytis cinerea</i>	SLNHTEAHQ-YRGG I VMNTEELFFPTLVGGT I DFATRMKVPFHRPSNNGSPEEYQQANRDFLLKSMG I SHTHETKVGNEYVRGVSGGERKRVS I EMLASRGVSMCWDNSTRGLDASSALDYTKA I RAMTD I FGMAS I VTLYQAGNG I
FgABCC15 <i>Fusarium graminearum</i>	LLATS FQ I TRYAGVFTAT I GLKV I TLLLELQNKARWMTWRKEDHSPEETS-----SLFNLGVYFW-----L I G I FRNGFKKTL S I KDDL YLLDHEMQSK I -----
FgABCC9 <i>Fusarium graminearum</i>	---PKDPPKKS WHKKM-----NPLRWGSPPPVPEKSVKSR-----EHEAGFLSKLTFQW-----MSPLMHAGYRRPLE-PND I WTVNPDRSVEPLTLKM
FgABCG6 <i>Fusarium graminearum</i>	G I PAEEMHKSHAGET I YTAEVD I HFPMLSVGDTL TFAARARCPQNLPPG I -DHNLYSEHMRDVVMAMYG I SHT I NTQVGDNY I RGVSGGERKRVT I AEATLSNAPFCQWDNSTRGLDSANA I EFCKTLRLQSELFGGTCAVS I YQAPQTA
FgABC1 <i>Fusarium graminearum</i>	G I PAEEMHKSHAGET I YTAEVD I HFPMLSVGDTL TFAARARCPQNLPPG I -DHNLYSEHMRDVVMAMYG I SHT I NTQVGDNY I RGVSGGERKRVT I AEATLSNAPFCQWDNSTRGLDSANA I EFCKTLRLQSELFGGTCAVS I YQAPQTA
FcABC1 <i>Fusarium culmorum</i>	G I TADEMHKYHAGET I YTAEVD I HFPMLSVGDTL TFAARARCPQNL PAG I -NHNLYSQHMRDVVMAMYG I SHTVNTQVGDNY I RGVSGGERKRVT I AEATLSNAPFCQWDNSTRGLDSANA I EFCKTLRLQSELFGGTCAVS I YQAPQTA
AtrB <i>Botryotinia fuckeliana</i>	SMTAKEAQ-YRGG I VMNTQEELFFPSLTVGETMDFATRLKVPNRLPNGVESPEAYREEYKKFLQSMG I SHTVDTKVGNEF I RGVSGGERKRVS I IECLGTRASVFCWDNSTRGLDASTALEWTKT I RTMTDVLGLST I VTLYQAGNG I
AtrA <i>Botryotinia fuckeliana</i>	GVSQQRRMMKEFKGEVVYNQEVDKHFPHLTVRQTLFEGAAARTPAHRFQNM-SRDEFASYAASVMA I FGLSHTHNTKVGNDFVRGVSGGERKRVS I AEMALAMTPFAAWDNSSRGLDSATALKFVQALRLSADLAGAAHAVA I YQASQS I
Pdr5p <i>Saccharomyces cerevisiae</i>	GYSGDD I KKHFRGEVVYNAEADVHLPHLTVFETLVTVARLKTQNR I KGV-DRESYANHLAEVAMATYGLSHTRNTKVGND I VRGVSGGERKRVS I AEVS I CGSKFCQWDNATRGLDSATALEF I RALKTQAD I SNTSATVA I YQCSQDA
Snq2p <i>Saccharomyces cerevisiae</i>	G I PQEEMMKRYKADV I YNGELDVHFPYLTVKQTL DFA I ACKTPALRVNNV-SKKEY I ASRRDLYAT I FGLRHNTYNTKVGNDFVRGVSGGERKRVS I AEALAAKGS I YCWDNATRGLDASTALEYAKA I R I MTNLLKSTAFVT I YQASEN I
Cdr1p <i>Candida albicans</i>	GLSPHD I ERHYRGDV I YSAETDVHFPHLSVGDTLEFAARL RTPQNRGEG I -DRETYAKHMASVYMATYGLSHTRNTNVGNDFVRGVSGGERKRVS I AEASLSGAN I QCWDNATRGLDSATALEF I RALKTSAV I LDTTPL I A I YQCSQDA
PMR1 <i>Penicillium digitatum</i>	G I SDKEMRNQFRGEA I YTAETDVHFQPLSVGNTLKFAALARAPRNRLPGV-SRDQYAEHMRDVVMAMGLSHT I NTRVGNDF I RGVSGGERKRVS I AEATLCGSPLCQWDNSTRGLDSANALEFCKTLNLMSKYSGTTCAVA I YQASQSA
ABC1 <i>Magnaporthe oryzae</i>	GLSAEEMHKHRGEA I YTAEVDVHFQPLSVGDTL TFAANARAPRRAPPGV-SKTLFANH I RDVVMA I FG I SHT I NTRVGNEY I RGVSGGERKRVT I AEALSGAPLCQWDNSTRGLDSANA I EFCKTLRVCTRLFQTTACVS I YQAPQSA
ABC2 <i>Magnaporthe oryzae</i>	PPTAKEFEK-YRGEAVYNQEDD I HHATL TVEQTLGFALDCKVPGKL PAG I -TKAQFKKDV I TMLLKMFN I EHTRNTVVGSLVRGVSGGERKRVSVAEMM I TSGS I LAWDNSTRGLDASTALDF I KSLR I QTNL YKTATFVSLYQASEN I
ABC3 <i>Magnaporthe oryzae</i>	-----KWDK I VLGS-----
ABC4 <i>Magnaporthe oryzae</i>	LDRENE I QRVCKSSLR-----GVSQCYGAAVFNGSPDFGG I -----WNYTLR-MDGA-----
MoABC5 <i>Magnaporthe oryzae</i>	---EEKQESTDKRG-----KRQAPHEQTAGV-----YARRSFWW-----LNR I LWTGFRNSKLKADDLYE I DDD I KTERYSQAL
CaABC1 <i>Colletotrichum acutatum</i>	LEKADSK-----A I APKDPSDDPYEH-----LPANEEA I LKRQVFTPEVKAG I ---MTLYR-----
MoABC7 <i>Magnaporthe oryzae</i>	LGNTQ-----WRVPHLWNHTAA I YSCQWLFL I G I -FRSAMVHPSSKLAQ I -----LV I VEFAL TSLFFMA I TTRKGNKTVLLEWEDG I PPARENLASLSSFTFSW-----VDQ I VWQGYKEPFEMGKVMNLLPKDKAATVLSH--
MoABC-R1 <i>Magnaporthe oryzae</i>	LL I LEEQKKTLRSGSD-----GSRKKAASEDLAGP-----TNQTFFLW-----LNRLFL TGYRRAFTTTD-----

BcatrA <i>Botrytis cinerea</i>	YELMDKVLV I DEGRMVSYSGPAGDAKKYFER I GYYCPPRQTTADFLTACTDPAE--RRFQKDF--EGP- I PKGPVELEKAFRESEDYRLLQEDVESYERMLHETDHADARQ--FKASVEETKSKTVGPRSPYTVSFFRQVLACTKREVELTLG
BcatrB <i>Botrytis cinerea</i>	YNLFDKVLVLEDEGKQ I YYGPMKQARPFMEELGF I CDDSANVADFLTGVTVPTE-RK I RDEF---QNR-FPRTAGE I LAAYNRHS I KNEMEKEYDYPTTA I AKERTED----FRTSVQHEKNPKLGKDSPLTTSFMTQVKACV I RQYQ I IWG
FgABCC15 <i>Fusarium graminearum</i>	--LLDRLT I SFAKSSANVG-----KRFRLAKALGRAL I VPL I-----LPVVPR I AM I GFQYAQP-----FF I HALLEYL- I HKDVPK
FgABCC9 <i>Fusarium graminearum</i>	KESFQRRVESGEKNPLFWAMHETFKTEFTWGG-ACALYTS I I QV I SPFTLRYL-----I QFAADAYVANQTGGPPPH I GK-----GVGLAVG I TLMQ I TQSLGT
FgABCG6 <i>Fusarium graminearum</i>	YDLFDKALV I YEGRQ I FFGPADEAKAYF I NLGFECPCRQTTPDFLTSMTAPSE--RVVRPGW--ENK--VPRTPDEFHARWKESQQYQ I VRAE I ESYKSLYPLNGSSADA--FRENKHSAAKAGQRLKSPFTLSYMQVQVLC LWRGFRRLLG
FgABC1 <i>Fusarium graminearum</i>	YDLFDKALV I YEGRQ I FFGPADEAKAYF I NLGFECPCRQTTPDFLTSMTAPSE--RVVRPGW--ENK--VPRTPDEFHARWKESQQYQ I VRAE I ESYKSLYPLNGSSADA--FRENKHSAAKAGQRLKSPFTLSYMQVQVLC LWRGFRRLLG
FcABC1 <i>Fusarium culmorum</i>	YDLFDKALV I YEGRQ I FFGPADEAKAYF I NLGFECPCRQTTPDFLTSMTAPSE--RVVRPGF--ENK--VPRTPDEFHACWKQSQQYQ I VRTE I ESYKSLYPLNGSSADA--FRENKHSAAKAGQRLKSPFTLSYMQVQVLC LWRGFRRLLG
AtrB <i>Botryotinia fuckeliana</i>	YDLFDKVLVLEDEAKQ I YYGPMTQARPYMETLDFVCREGSNVADFLTGVTVPTE-RK I RSGF--EAR-FPRNADAMLEEYKNSAVKADM I SEYDYPDSEYAKLRTED----FKQA I AEEKAKQLPKSSPFTVDFMNVQV I CVTRQYQ I LWG
AtrA <i>Botryotinia fuckeliana</i>	YEVFDKVTLYEGRM I FFGPTGTAKKEYFERMGWVCPARQTTGDFLTS I TNPLE-RKARAGM--EDV-VPKTPKDFE I YWRQSPEYKTLLEGMTGVRDQHPTGNDEQASAE LRARKENSQSRNSRAASPY I LSI PMQ I KLTNKRAYQR I WNW
Pdr5p <i>Saccharomyces cerevisiae</i>	YDLFNKVCVLDGQYQ I YYGPADKAKKYFEDMGVYCPSRQTTADFLTSTVSPSE-RTLNDMLKKG I HI PQTPKEMNDYVWKS PNYKELMKEVD---QRLNDDEASREA I KEAH I AKQSKRARPSSPYTVSYMMQVKYLL I RNMWRLRN
Snq2p <i>Saccharomyces cerevisiae</i>	YETFDKVTVLYSGKQ I YFGL I HEAKPYFAKMGYLCPPRQATAEFLTALTDPNGFHL I KPGY--ENK--VPRTAEFEFYWLNSPEFAQMKKD I AAYKEKVNTKTEKEV---YDE SMAQEKS KYTRKKSYYTVSYWEQVLC TQRGFQR I YG
Cdr1p <i>Candida albicans</i>	YDLFDKVVLVYEGYQ I FFGKATKAKEYFEKMGWKCQRQTTADFLTSLTNPAE--REPLPGY--EDK--VPRTAQEFETYWKNSPEYAE L TKE I DEYFVECERSNTRET---YRESHVAKQSNNTRPASPYTVSFFMQVRYGVARNFLRMKG
PMR1 <i>Penicillium digitatum</i>	YDVFDKVTVLYEGRQ I YFGRTTEAREFFTNMGFHGCPDRQTTADFLTSLTSPA E--RVVKPGF--EKM--VPRTPDEFAGWKNSAAYKELQKE I DDYNTQYP I GGESFQQ--FVESRKAMQSKGQRAKSPYTL SVAEQVQ I CVTRGFQRLKS
ABC1 <i>Magnaporthe oryzae</i>	YDMFDKAVVLYEGYQ I YFGPADEAKQYFVNLGFECPAR--TTPDFLTSMTAPHE-R I VRPGF--EGK--APRTPEEFA I AWENSAEY TALQAD I EEYKSSHP I NGPDAEA--FRKSRAAQGRGQRPNSPYTL SFYQQTCL LWRGWKRLLG
ABC2 <i>Magnaporthe oryzae</i>	YKLFDKVLV I DAGRQVYFGPATEARGYFEGLGFLPRPRQTTDPDYVTGCTDEYE--RAYSEGYS PDN--APHSPETLAEAFKKSDFAKRLDNEMVEYRESLKEDQQKYED--FK I AVKEGKRTGAK--KSVYTVG FHRQVWALMKRQTVLKLQ
ABC3 <i>Magnaporthe oryzae</i>	-----TVSSVATGLT I PLMVVV-----FARL I G I FTFDYRQGSTVTGAQ-----FSSQVNGCVYN I I YLFVA
ABC4 <i>Magnaporthe oryzae</i>	LGPLGR I DVESNTRDAQ I-----FVL PFQRAVDAA I TGLNSSN-----SSP--LSNSHEYVFTSLTQSERDEE I R-----V
MoABC5 <i>Magnaporthe oryzae</i>	ASAWGRAD-----KSKKRALLRSTLSVLKWPLL-----I PALPRFAQ I FLNLAQPLLLL R-----LLQHVSPPSAAGTEAEAQER
CaABC1 <i>Colletotrichum acutatum</i>	YSSTNDLL I LSI S-----AFTS I VVGAALPLMTV I-----FGNLQGT FQNYFAGTMSKADFNSEMA-----S
MoABC7 <i>Magnaporthe oryzae</i>	YRRVKKTKLYWHLLRYF-----KGDLLSQAGWAVM-----SGM-FTFAPTMLLKA I LEYVEEPESA-----PRSVVWLYV I LLPVTDI I RSLGD
MoABC-R1 <i>Magnaporthe oryzae</i>	LEL I SSPLYVKS I RAQFHGMTNGQTANGHSL--FSSSTNTFALQAFTSLGSYAL-----APV I PRLAVTGFTFSQ-----SFLVTALLDYLENGDRDPA

BcatrA <i>Botrytis cinerea</i>	DKTTLTYTKFFIIISNSLIVGSLFHGQ--SSNTLGN-----FSRGGTLFFSIILFLGWL-----QLSELMKAVGGRPIISRHKDYA-FYRPSAVVVARVVQDFPLLLLQVVPFSIVV-YFITGLDVDAGKYFIVVLFIVLTT
BcatrB <i>Botrytis cinerea</i>	DKATFIKQLSTLAQAL IAGSLFYNA--PANSSGL-----FVKSGALFLSLLFNALL-----AMSEVTDSSGRPVLAHKHKAFA-FYHPAAFCIAQIAADIPVLLVQVSHFSLSVM-YFMVGLRQDAGAFFTYWILIFAAT
FgABCC15 <i>Fusarium graminearum</i>	NDGYGLIGAALI IYAGIAISDALFWY--FHQRCLY-----MARGC--LASVYVRSTT-----QGKMTDIGDAAVLTLMSTDVERIIYGFHGLHDFWANIIEIGLGC-FLLQRQLG--LAFISPIVVILLCV
FgABCC9 <i>Fusarium graminearum</i>	NHYIYRGMTVGGQSRGVLIGLIYEKS--LVISGRA-----KAEGA--LQSNVRDAEDDDQAKKKAKKAKKAPDASDGTGWNGRITAILQSVDTYRVDQASALFHMVWTSPILCLLTL-ALL--LVNITYSALAGYGLLVIGM
FgABCG6 <i>Fusarium graminearum</i>	SPGVTIFQLIANTAVAFIASSLFYNM--KPETGDF-----FKRGATLFLAVLSNAFA-----SALEILTQYSQRPIVEKQARYA-FYHPSAEAFASILVDMPIYKINTSILFNVTL-YFMTNLNRDAGAFFFLVVSFIMV
FgABC1 <i>Fusarium graminearum</i>	SPGVTIFQLIANTAVAFIASSLFYNM--KPETGDF-----FKRGATLFLAVLSNAFA-----SALEILTQYSQRPIVEKQARYA-FYHPSAEAFASILVDMPIYKINTSILFNVTL-YFMTNLNRDAGAFFFLVVSFIMV
FcABC1 <i>Fusarium culmorum</i>	SPGVTIFQLIANTVAFIASSLFYNM--KPETGDF-----FKRGATLFLAVLSNAFA-----SALEILTQYSQRPIVEKHARYA-FYHASAESFASILVDMPIYKILNSILFNVTL-YFMTNLNRDAGAFFFLVVSFIMV
AtrB <i>Botryotinia fuckeliana</i>	DKATFIKQVSTLIQALIAGSLFYDA--PNNSGGL-----FVKSGALFSLLYNSLL-----AMAEVTESFQGRPVLIKHKSFA-FFHPAAFCIAQIAADIPVLI FQVTIFALPV-YFMVGLEMDAGVFTTYWILVFATT
AtrA <i>Botryotinia fuckeliana</i>	DMSSTMSTVVQGI VIALITGVVFYDS--PNTTAGF-----QSKGGTLFYAVLLNALT-----AMSEITSLSYQRPIVEKQASYA-FYHPATEAIGVVSDDVPVKFLLAVAFNVIM-YFLANLRREPAQFFIYFLMSFTVM
Pdr5p <i>Saccharomyces cerevisiae</i>	NIGFTLFMILGNCSMALILGSMFFKIMKKGDTSTF-----YFRGSAMFFAILFNAFS-----SLLEIFSLYEARPI TEKHRTYS-LYHPSADAFASVLSSEIPSKLIIAVCFNIIF-YFLVDFRRNGGVFFFYLLINIVAV
Snq2p <i>Saccharomyces cerevisiae</i>	NKSYTVINVCSAIIQSFITGSLFYNT--PSSTSGA-----FSRGGVLYFALLYYSLM-----GLANI--SFEHRPI LQKHKGYS-LYHPSAEAIGSTLASFPFRMIGLTCFFIIL-FFLSGLHRTAGSFFTIVYFLMTMCS
Cdr1p <i>Candida albicans</i>	DPSIPIFSVFQQLVMGLILSSVFYNL--SQTTGSF-----YYRGAAMFFAVLFNAFS-----SLLEIMSLFEARPIVEKHKKYA-LYRPSADALASIISELPVKLAMSMSFNVF-YFMVNFRRNPGRFFFYWLMCIWCT
PMR1 <i>Penicillium digitatum</i>	DYSLTISALIGNTIMALIVGSVFYQL--PDDVTSF-----YSRGALLFFAVLLNSFS-----SALEILTLYAQRPIVEKQARYA-MYHPFAEAISSMLCDMPYKILNAITFNVTL-YFMTGLRQNAGAFFFMFLFSFVTT
ABC1 <i>Magnaporthe oryzae</i>	DPTLTVGALFANTLMALVSISSIFFNL--QMTTSSF-----FQRGALLFFACLLNGFA-----AALEILILFAQRPIVEKHDRYA-LYHPSAEAVASMLCDMPYKVFNAILFNLVL-YFMANLRREPAGAFFFYLLISFATV
ABC2 <i>Magnaporthe oryzae</i>	DRMALFLAWMRTILIAIVVGTLYINL--GQTSATS-----FSKGGLMFI SLLFNAFE-----AFAELGSTMLGRGIVNKHKAYA-FHRPSALWIGQIFVDQAFGVPRVLAFSIIV-YFMTNLFRSAGAFFMFFLFI MLGN
ABC3 <i>Magnaporthe oryzae</i>	RIIFSYSINLGRMFSLRISSTIRTV-----YLRSLFALPI-----SVIDAIPAGQTAAIVGTASL--LQVGISEKLGGLIASLASVASSVVVA----LVFNWLLT----FVTIAGLAFIA-
ABC4 <i>Magnaporthe oryzae</i>	RYQQAVTNFMGVAFILAIIIGVCYHLT-----GF-----MATEREIGMSTLIESMM-----PTRQRWQAQAARLLSYHIAFDVI-----YLPGWII GALIQLQGVFRHTSTAM
MoABC5 <i>Magnaporthe oryzae</i>	RVGQGLIATILVYFGLAVFNGYYGS--KINRAVV-----LVRGS--LIDLIRHML-----ELDLTTCKTTAASGPAGLVMTDVERVDLAVDKLHALWAAPIEVGLGI-FLIARQVG--WACIGTAVVAAGCT
CaABC1 <i>Colletotrichum acutatum</i>	LVLYFVYLAIGVFCQYITTVGFITG--EHISAKI-----REHYLQSCMRQNI-----GFFDKLGAGEVTTRITADTNL--IQDGISEKVGLTLAAIATFISAFVIG----FVHYWKL-----LILLSTVVALL
MoABC7 <i>Magnaporthe oryzae</i>	NRALWIGRKICINVRAILVGEIYAKALRRKAATGKDTVLGSEKKEDKPKGG--FISKIKKMLCLGDNDESEDGKGDKDKEDSSDEQANHGTIINLMSVDSFNVSEVTSYLHFLFASAPTQLLVSVLLYQVLG--MSAIPGFVVMVLLL
MoABC-R1 <i>Magnaporthe oryzae</i>	SHGYGLLGAYAFVYIGI AVSNSWYSR--HTYKSVS-----IIRGG--LIVSIFEVL-----RLGEDSSI EAKATT--LMSIDVQRIVGGLVYIHEVWAGVLETALAT-YLLQRVMG--VSSVAMLGLALSCG

BcatrA <i>Botrytis cinerea</i>	I C I T S L Y R M F A A L S P S I D D A V R F S G I G L N L L I I Y T G Y V I P K P Q L V S E Y I W F G W L Y Y I N P L S Y S F E A V I S D E F Y N K N I T C A P D Q I V P S G --- P G Y T N P E --- F Q G C A S T - G A E V G S L S V S G A R Y L E Q S F N - Y S R S H L W R N F G V V I A W T V L Y I I
BcatrB <i>Botrytis cinerea</i>	M C M T A L F R A V G A G F S T F D A S K V S G F L V S A L I M Y T G Y M I Q K P D M H P --- W F V W I Y W I D P L A Y G F S A I L A N E F K G Q I I P C V A N N L V P N G --- P G Y A D L A --- F Q A C A G V G G A L P G A T S V T G E Q Y L N S L S --- Y S S S N I W R N F G I L W A F W V L F V V
FgABCC15 <i>Fusarium graminearum</i>	A A T T A I A W A I G E R Q S R W M A K I E S R V G L T S S I I S N I K S L R I --- S G --- I T A P V R D L V Q K M R E Q E L S I G N K F R W L L I M T A T V A F V P S A ----- M S P V V A F A F T N E Q L D T L K I ----- F V S F S F I T L L T N P L G A
FgABCC9 <i>Fusarium graminearum</i>	P F L T R A I R S L F H R R R A I N L I T D Q R V S L T Q E I L Q S V R F V K Y --- F G --- W E K A F L E R L G D L R N K E I R A I Q I L L A I R N A L N A V S M ----- S L P I F A S M L S F I C Y S L T H N G - L T A A E V F S S L A L F N G L R I P L N L
FgABCG6 <i>Fusarium graminearum</i>	L A M S G V F R S I A S L S R T L S Q A M V P A S L L I L A L V I F A G F V V P V D Y M L G --- W C R W I N Y L D P V A Y G F E S L M V N E F S G R N F T C T --- A F V P N A Q I P G Y A D V G G L N R A C S T V - G A I P G Q S Y V N G D A Y I N L E Y K - Y F H A H K W R N V G I L I A M T I F N H V
FgABC1 <i>Fusarium graminearum</i>	L A M S G V F R S I A S L S R T L S Q A M V P A S L L I L A L V I F A G F V V P V D Y M L G --- W C R W I N Y L D P V A Y G F E S L M V N E F S G R N F T C T --- A F V P N A Q I P G Y A D V G G L N R A C S T V - G A I P G Q S Y V N G D A Y I N L E Y K - Y F H A H K W R N V G I L I A M T I F N H V
FcABC1 <i>Fusarium culmorum</i>	L A M S G I F R S I A S L S R T L S Q A M V P A S L L I L A L V I F A G F V V P V D Y M L G --- W C R W I N Y L D P V A Y A F E S L M V N E F S G R N F T C T --- A F V P N P Q I P G Y A D V G A L N R A C S T V - G A I P G Q S Y V N G D A Y I N L E Y K - Y F H S N K W R N V G I L I A M M I F N H V
AtrB <i>Botryotinia fuckeliana</i>	M A M T A V F R A C G A A F K T F D D A S K V S G F L I S A L I M Y T G Y M I R K P E M H P --- W F V W I Y W I D P L A Y G F D A L L S N E F H G K I I P C V G T N L V P A G --- P G Y E N A T --- T Q S C T G V G G S I P G R N Y V T G D D Y L A S L S --- Y S H G H V W R N F G I L W A W A L F V V
AtrA <i>Botryotinia fuckeliana</i>	F V M S A V F R T M A A V T K N A A Q A M G L A G V L M L A L V V Y T G Y L P V P S M H P --- W F E W I H Y L N P I Y A F E A M I A N E F H G R D F D C I --- A F V P S M --- Q I W T G D S F S C S S L - G S V A G E R M V S G D S Y I N F N Y T - Y T Y S H V W R N F G V L L A F L I G F M A
Pdr5p <i>Saccharomyces cerevisiae</i>	F S M S H L F R C V G S L T K T L S E A M V P A S M L L L A L S M Y T G F A I P K K K I L R --- W S K W I W Y I N P L A Y L F E S L L I N E F H G I K F P C A --- E Y V P R G --- P A Y A N I S S T E S V C T V V - G A V P G Q D Y V L G D D F I R G T Y Q - Y Y H K D K W R G F G I G M A Y V V F F F F
Snq2p <i>Saccharomyces cerevisiae</i>	E A I N G L F E M V S S V C D T L S Q A N S I S G I L M M S I S M Y S T Y M I Q L P S M H P --- W F K W I S Y V L P I R Y A F E S M L N A E F H G R H M D C A - N T L V P S G --- G D Y D N L S D D Y K V C A F V - G S K P G Q S Y V L G D D Y L K N Q F Q - Y Y Y K H T W R N F G I L W C F L L G Y V V
Cdr1p <i>Candida albicans</i>	F V M S H L F R S I G A V S T S I S G A M T P A T V L L A M V I Y T G F V I P T P S M L G --- W S R W I N Y I N P V G Y V F E S L M V N E F H G R E F Q C A --- Q Y V P S G --- P G Y E N I S R S N Q V C T A V - G S V P G N E M V S G T N Y L A G A Y Q - Y Y N S H K W R N L G I T I G F A V F F L A
PMR1 <i>Penicillium digitatum</i>	L T M S M I F R T I A S Y S R T L S Q A L V P A A I I L I L V I Y T G F T I P T R N M L G --- W S R W M N Y I D P I A Y G F E T L I V N E F H G R N F P C N P E S F I P A G --- D S Y A D V G R F N K I C S A K - G A V A G Q N F V S G E A Y Y T A S F Q - Y S N S H R W R N M G I M I G F M V F F M V
ABC1 <i>Magnaporthe oryzae</i>	L A M S M M F R T I A S M S R S L S Q A M V P A A A I I L I L I I F T G F V I P L D Y M L P --- W C R W L N Y I D I L A Y S F E S L L I N E F A G Q R Y T C T --- E F V P R A E F P G Y G D L S G T N R V C Q A V - G S V A G Q P F V K G E D Y L Y S S F R - Y E S A N K W R N F G I L I A F M I F F C S
ABC2 <i>Magnaporthe oryzae</i>	I A M T L F F R I I G C I S I D F D Y A V K F A V V T I T L L I T T S G Y I I Q Y Q S Q Q V --- W L R W I F W I N P L G L M F S M M G N E F S R I D M T C T A E S L I P S G --- P G Y N N P E --- N Q V C T L P - G S K P G S L E V S G S D Y I R T G F A - Y D P N D I W R N F G I V M G L V A F F L I
ABC3 <i>Magnaporthe oryzae</i>	I V Y V I F T P L V G K K A L E V H E A D V K A S S I A T E A F T S V R M L A A --- C G --- A E N K V A R R Y A V H V D E S Y Q K G L R M A W L V G V Q Q M F V F F G V Y ----- A T F A L A F Y A F R M Y N T S I T T --- T P E D L I V V L L C V M M M A T S I G Q
ABC4 <i>Magnaporthe oryzae</i>	Y V F Y N I T A G L A L S S M S I F G A A F F K A Q L S G V V V T I V Y C ----- V L A I V A Q A I S Y P S T A Q V T I --- L S L L F A P C N Y Y F I A N T ----- A R W E A K K W P T D L T D V P P N S A W D I P A I W L W V F L I I Q I I V Y P -- I
MoABC5 <i>Magnaporthe oryzae</i>	L A T T R I S R L L P T R Q A W N Q S V Q R R V A L T S T A L N N I K S I K M M --- G G --- F E R H V A D R L Q A A R E A L D A S A S F R K C M T I V N T L V M V P R Q ----- L S A P L V L T L Y A L G V N N N N G T L L T A S Q A F T T L A L I E I V A V P M G L
CaABC1 <i>Colletotrichum acutatum</i>	L S M G G G S T F I V K Y S K Q S I E S Y A H G G S L A D E V I S S I R N A V A --- F G --- T Q D R L A K Q Y D A H --- L T K A E F F G Y K V K S A I G V M V A L M M T I L Y L N Y G L ----- A F W Q G S K F L I D D G ----- I K L S N I L I I M M S I M I G A F N L G N
MoABC7 <i>Magnaporthe oryzae</i>	P V N I G F G R A F N S T Q K K I M A C S D K R I H S T N E V L Q N I R I I K Y --- F A --- W E H R F S E S V D E K R K A E L K A L R A - R Y M V W A C A V A V W N T V P ----- L L I T F F S F L M Y T T V E K R P L H P S I A F T S I S L F M L L R H P L D Q
MoABC-R1 <i>Magnaporthe oryzae</i>	V G A Y F V A G N M S L Q Q G K W L K A M E Q R I D A T K R L C D S L K A V K M --- R G --- A E T R V S R V N E L R R L E I Q A A R P F R A L I T A S V I L S Y S T M T ----- L S P L L V F A A Y I G V N G N D D N - L D S A T M F S S L V L I A L L G S P L V H

BcatrA <i>Botrytis cinerea</i>	VTAIAIEVFDFTTGGG---GALEFK---RSKAAKNKVKAENATPDEENSPASTSPVPTSGASSNTLEPPQEEALK---DITGSESVFTWE-----NVEYTVPYLGGERRKILNGVNGYAKPGIMVA
BcatrB <i>Botrytis cinerea</i>	LTIYYTSNWSANGGKS---GILLIPREKAK-KNTA---ILKAANAGDEESQAI EEKRQVQSRPASQDTKVAEESDD---QLMRNTSVFTWK-----NLTYTVKTPSGDRVLLDNVQGVKPGMLGA
FgABCC15 <i>Fusarium graminearum</i>	MFQSVPAVIAAFVCLE---RIQKFL---EIEPRVDYRKSSRPLSPADGSLLEQDDEKPLGLGQGASKS-----LISIVDGSFGW-----TSEKMTLTGIVSDVPVQKLT
FgABCC9 <i>Fusarium graminearum</i>	LPMVLGQVIDAWGSVQ---RIEEFL---LQEE---T---VEDTVFDAKGDD-----AIRLEDASFTEKSHKEEAGKEENGKKEKTKQAPPPQVESSGDDSTLVEEREPEFKLQDLNFDVKRNLVA
FgABCG6 <i>Fusarium graminearum</i>	VYIVATEFISAKKSKG---EVLVFR-----RSNMPSKAKSDPEASSSRIPITTEKNNNEVA-----NIQGSTSVFHWN-----DVCYDIKIKGEPRRILDHVDGWVKPGTLTA
FgABC1 <i>Fusarium graminearum</i>	VYIVATEFISAKKSKG---EVLVFR-----RSNMPSKAKSDPEASSSRIPITTEKNNNEVA-----NIQGSTSVFHWN-----DVCYDIKIKGEPRRILDHVDGWVKPGTLTA
FcABC1 <i>Fusarium culmorum</i>	VYIVATEYISAKKSKG---EVLVFR-----RSNMPSKAKSDPEASSSRIPITTEKNNNEVA-----NIQGSTSVFHWN-----DVCYDIKIKGEPRRILDHVDGWVKPGTLTA
AtrB <i>Botryotinia fuckeliana</i>	VTIIATSRWKGASENG---PSLLIP---R-ESVEKHRQHGHHRDEESQSNEXTSTKGKSEGVQDSSDIDN-----QLVRNTSVFTWK-----DLCYTVKTPSGDRQLLDHVYGVKPGMLGA
AtrA <i>Botryotinia fuckeliana</i>	IYFLASELNSSTTSTA---EALVFR---R-GHVPEYMRPGYTRPTDEEKAVTQSDIKPSSPSPTNPIL-----PLPPQRDIFTWK-----DISYDIEIKGEPRRLDDVSGVVKPGTLTA
Pdr5p <i>Saccharomyces cerevisiae</i>	VYLFLCEYNEGAKQKG---EILVFPRSVK-RMKK---RGVLTEKNANDPENVGERSDLSSDRKMLQESSEESDITYGELGLKSEAIFHWR-----NLCYEVQIKAETRRILNNVDGWVKPGTLTA
Snq2p <i>Saccharomyces cerevisiae</i>	LKVIFTEYKRPVKGGG---DALIFK---K-GSKRFIAHADEESPDNVNDIDAKEQFSSESSGANDEVF-----DDLEAKGVFIWK-----DVCFTIPYEGGKRMLLDNVSGYCIPTGMTA
Cdr1p <i>Candida albicans</i>	IYIALTEFNKGAMQKG---EIVFLKGLSK-KHKR---KTAASNKGDIEAGPVAGKLDYQDEAEAVNNEKFTEKGSTGSVDFFPENREIFFWR-----DLTYQVKIKKEDRVILDHVDGWVKPGQITA
PMR1 <i>Penicillium digitatum</i>	TYLVGTEYISEAKSKG---EVLVFR---R-GYAP---KNSGNSDGDVEQTHGVSSAEKKDGAGSGGEQESA-----AIQRQTSIFQWQ-----DVCYDVHIKNEERRILDHVDGWVKPGTCTA
ABC1 <i>Magnaporthe oryzae</i>	RTWLRPRMCKERKKSKG---EVLVFR---R-GQRPAAIKDAKTDPEAGPPKVGGAIVAAANMTGENAG-----FIQRQTSFTGWR-----DVCYEVQIKKETRRILDHVDGWVKPGTLTA
ABC2 <i>Magnaporthe oryzae</i>	MNVVLGEVIEFGMGGN---SALVYQ---K-PNKE---RKELNEKLVAKREAQRSSKSEAQGSDD-----LKIESKRVLTWE-----NLTYDVPVPGGNRRLNNVFGYVKPGQLTA
ABC3 <i>Magnaporthe oryzae</i>	ITAPLAAQQAEEACGIFHTIIDFP---K-----PVYGSARGEHEVRADG-----DIVLMNVNFAY-----PTRPEVKVLDNLSLVFPAGKVTA
ABC4 <i>Magnaporthe oryzae</i>	VGALIERLYGTATKG---RNI-----VNGGEMGGEAAVRLEGFTKIY-----KPGFIRRMFSF-----ISKPKPAVRAVDGLTLSAGRGQILA
MoABC5 <i>Magnaporthe oryzae</i>	LLQALPNITSSLACLD---RIQAFLLSKARVDHRG---QLQTTADMDEKPKNVTTTAISTIDVTTGVSTTVDKTPNL---MASFKNASFFY-----ATGEKDAFSLSQISMVLPRGSITI
CaABC1 <i>Colletotrichum acutatum</i>	VAPNVQAFTTAIAAAA---KIYNTI---D-RVSP---LDPSRDDGTLKEQVEG-----TIRLENIKHIIY-----PSRPEVTVMDDVSLTIPAGKTTA
MoABC7 <i>Magnaporthe oryzae</i>	LGDMLAHVQEAKVSID---RIEEFL---SEEE---TDKFIQLGEDNVNEEGTR-----IIALKDAAFIW-----GGKDIIAADGSQAFLRLDIDTEFMIGKLVN
MoABC-R1 <i>Magnaporthe oryzae</i>	LFQAMPALGSAHGCFE---RILAFL---K-TPEK---PLTIKNEPETMPESNRGTKDASIQRSEANET-----ALSIRHASIGW-----SPDEPVLKIDINLQIQKGSFVA

Walker A: GxSGxGKS

ABC signature: SGGQ

BcatrA <i>Botrytis cinerea</i>	LMGASGAGKTTLLNTLSQRQKTG-----VVT-GDMLVDGRP-----LGTEFQRGTGFCEQMDLHDGTATIREALEFSAIL-RQEHTVPRAEKIEYVDKII--DLLEL-----GDMQDALVRSLG-----VEQRKRVTIGVE
BcatrB <i>Botrytis cinerea</i>	LMGSSGAGKTTLLDVLAQKTDG-----TIK-GSILVDGRP-----LNVSFQRSAGYCEQLDVHEPLATVREALEFSALL-RQSRTVPDAEKLRYVDTII--DLLEM-----HDMENTLIGNTGAGLSVEQRKRLTIGVE
FgABCC15 <i>Fusarium graminearum</i>	VVGVPVAGKSTFCKALLG--EVP-----FSS-GEVIPSTE-----APIGYCEQTPFL-KNGSIRDNI IWHSVY-NQTRY-----EEVLDACL--LRTDL----DILPEGDATTIGSNGIMLSGGQKQRVSLARA
FgABCC9 <i>Fusarium graminearum</i>	VIGSVGSGKSSLLSALAG--DMR-----KTN-GQVTFGSSR-----AFCPQYAWI-QNTTLKNNIIIFGKIDKAWY-----NKVIQACA--LQADI----DMLPNGDLTEIGERGITISGGQKQRLNIIARA
FgABCG6 <i>Fusarium graminearum</i>	LMGVSGAGKTTLLDCLADRLSMG-----VIT-GEMLVDGKI-----RDSSFQRRTGYVQQQDLHLETSTVREALTFSALL-RQPASTPREEKIAYVDEVI--KL LDM-----QEYADAVVGVLGEGLNVEQRKRLTIGVE
FgABC1 <i>Fusarium graminearum</i>	LMGVSGAGKTTLLDCLADRLSMG-----VIT-GEMLVDGKI-----RDSSFQRRTGYVQQQDLHLETSTVREALTFSALL-RQPASTPREEKIAYVDEVI--KL LDM-----QEYADAVVGVLGEGLNVEQRKRLTIGVE
FcABC1 <i>Fusarium culmorum</i>	LMGVSGAGKTTLLDCLADRLSMG-----VIT-GEMLVDGKI-----RDSSFQRRTGYVQQQDLHLETSTVREALTFSALL-RQPASTPRDEKIAYVDEVI--KL LDM-----QEYADAVVGVLGEGLNVEQRKRLTIGVE
AtrB <i>Botryotinia fuckeliana</i>	LMGSSGAGKTTLLDVLAQRKTAG-----TIQ-GSVLVDGRP-----LPVSFQRSAGYCEQFDVHEPYATVREALEFSALL-RQPRTTPREEKLKYVDVII--DLLEL-----HDIADTLIGRVGAGLSVEQRKRVTIGVE
AtrA <i>Botryotinia fuckeliana</i>	LMGVSGAGKTTLLDVLAHRTTMG-----VIT-GDMFVNGKG-----LDASFQRKTGYVQQQDLHLETATVRESLRFSAI L-RQPAVSIREKHDIYESVI--EMLGM-----GDFCRACCGTPGEGLNVEQRKLLTIGVE
Pdr5p <i>Saccharomyces cerevisiae</i>	LMGASGAGKTTLLDCLAERVMTG-----VIT-GDILVNGIP-----RDKSFPRSIGYVQQQDLHLKTATVRESLRFSAI L-RQPAEVSIEEKNRYVEEVI--KILEM-----EKYADAVVGVAGEGLNVEQRKRLTIGVE
Snq2p <i>Saccharomyces cerevisiae</i>	LMGESGAGKTTLLNTLAQR-NVG-----IIT-GDMLVNGRP-----IDASFERRTGYVQQQDIHIAELTVRESLQFSARM-RRPQHLPDSEKMDYVEKII--RVLGM-----EEYAEALVGEVGCGLNVEQRKKLSIGVE
Cdr1p <i>Candida albicans</i>	LMGASGAGKTTLLNCLSERVTG-----IITDGERLVNGHA-----LDSSFQRSIGYVQQQDVHLPTSTVREALQFSAYL-RQSNKISKKEKDDYVDYVI--DLLEM-----TDYADALVGVAGEGLNVEQRKRLTIGVE
PMR1 <i>Penicillium digitatum</i>	LMGVSGAGKTTLLDVLATRVMTG-----VVS-GEMLVDGRP-----RDQSQRKTGYVQQQDLHLHTTTVREALRFSAIL-RQPRHVSHQEKLDYVEEVI--KL LGM-----EHYADAVVGVPGEGLNVEQRKRLTIGVE
ABC1 <i>Magnaporthe oryzae</i>	LMGVSGAGKTTLLDCLADRTSMG-----VIT-GEMLVDGHQ-----RDASFQRKTGYVQQQDLHLQTTTVREALNFSALL-RQPAHVPAEKLAYVDEVI--RL LDM-----QEYADAVVGVPGEGLNVEQRKRLTIGVE
ABC2 <i>Magnaporthe oryzae</i>	LMGASGAGKTTLLDVLASRKNIG-----VIG-GDILVDGKK-----PGKEFQRSTSYAEQLDVHEPTQTVREALRFSADL-RQPFDTPQEEKYAFVEEMI--TLLEL-----EDLADSIIGWPEFGLTVEQRKRVTIGVE
ABC3 <i>Magnaporthe oryzae</i>	IVGPSGSGKSTIVGILERWYEFNGDPVLNPLVLYLRNGFVSVGGRL-----LTEIDVKWWRNQIGLVQQDNVL-FNTTIYKNVEHGLIG-TLWEHESDEKKAMLIETACRDAFADE--FINRLPDRYQTTVVGESGIKLSGGQQRQLAIIARA
ABC4 <i>Magnaporthe oryzae</i>	LLGANGSGKSTSLDAIAG--IN-----RLTSGSITIDGTG-----GLGIAPQKNVLWDDVTVEEHIRIFNSL-KAPANKSSKEEIRQLVEAV--DLTKK-----IKARSKTLSGGQKRKLQLGMM
MoABC5 <i>Magnaporthe oryzae</i>	VAGPVGSGKSTLLKAILG--ELE-----LVA-GEVDVNP GP-----IGFCDQNPWI--SNGTVRQCIGGNSEY-DSELYDDVVRTCALDQDIM--RWGEE--GSGSGNGSDMNVGSRGMALSEGQKHLALARA
CaABC1 <i>Colletotrichum acutatum</i>	LVGASGSGKSTIV-GLVERFYDP-----VR--GSVFLDGH-----ISTLNLRWL RQMALVSQEPTL-FATTIYQNI RYGLIG-TQHENASEEEQKKLIEEAA--KMANAHDFISGLPEGYL TNVGERGFLLSGGQQRILAIARA
MoABC7 <i>Magnaporthe oryzae</i>	IAGPTGSGKTSLLMALLG--EMT-----LLK-GRVYLPGGRSREDVRPDPETGLAETCAYVAQQAWL-VNANI KDNILFSARF-DEKRY-----RDVIVACA--LERDL----EILDNGDETIVGEKGITLSGGQQRISLARA
MoABC-R1 <i>Magnaporthe oryzae</i>	LVG KTGSGK SLLKSAIG--EGG-----HVS-GSIDISLDK-----VAYCSQSPWLENI SAHTWTQFGESGDAKWL-----AGVIDACCLDDL TGL-----PDYRTGRIGSGGAR LSGGQKQRLALARA

Walker B: LxxDExxSALD

BcatrA <i>Botrytis cinerea</i>	LAAPNLLLFLDEPTSGLDSQSAYSIVRF-----LKKLS-AAGQAI VCTI HQPSS-VL I QEFDMI LALNPG-----GNTFYFGPVGENGSA-----VVKYFADRGV-QCPPQKNVAEFI-----LE
BcatrB <i>Botrytis cinerea</i>	LVSKPSIL I FLDEPTSGLDGQAAFNTVRF-----LRKLA-DVGQAI LVTI HQPSA-QLFAQFDSL LLLAKG-----GKTVYFGD I GEDSKT-----IKEYFARYDA-PCPESSNPAEHM-----ID
FgABCC15 <i>Fusarium graminearum</i>	LYLETDFLL-IDDI LSGLDNSTGNDVFRRVFGP-NGLMRRRNATAI LCT-HA IRY---LPLADH I I I LATD-----GTVGEQGPFDKLAETGI-----YIPTLGLSDADDASSTNSSI-----PVE
FgABCC9 <i>Fusarium graminearum</i>	IYFDADI VL-MDDPLSAVDAHVGRHIFDN-----A I LGLLKDKCR I LATHQL---WVLSRCDRI I WMEHG-----K I QA I DTFEKL MRDHKGFGT-----LM
FgABCG6 <i>Fusarium graminearum</i>	LAAPPLLLFVDEPTSGLDSQTSWA I LDL-----LEKLS-KAGQSI LCTI HQPSA-MLFQRFDRLLFLAKG-----GRT I YFGD I GKNSET-----LTNYFVKHGSQECPNGENPAEWM-----LE
FgABC1 <i>Fusarium graminearum</i>	LAAPPLLLFVDEPTSGLDSQTSWA I LDL-----LEKLS-KAGQSI LCTI HQPSA-MLFQRFDRLLFLAKG-----GRT I YFGD I GKNSET-----LTNYFVKHGSQECPNGENPAEWM-----LE
FcABC1 <i>Fusarium culmorum</i>	LAAPPLLLFVDEPTSGLDSQTSWA I LDL-----LEKLS-KAGQSI LCTI HQPSA-MLFQRFDRLLFLAKG-----GRT I YFGD I GKNSET-----LTNYFVKHGSQECPNGENPAEWM-----LE
AtrB <i>Botryotinia fuckeliana</i>	LVSKPSIL I FLDEPTSGLDGQSA YNTVRF-----LRKLA-DVGQAVLVTI HQPSA-QLFGFDSL LLLAKG-----GKMVYFGD I GDNGST-----VKEYFGRHGA-PCPPNANPGEHM-----ID
AtrA <i>Botryotinia fuckeliana</i>	LPPSPKLLLFLDEPTSGLDSQSSWA I CTF-----LRKLA-DSGQAVLCTI HQPSA-I LQEFDQL LFLAKG-----GKTVYFGP I GPNSRT-----LLDYFESNGARKCDEANPAEYM-----IE
Pdr5p <i>Saccharomyces cerevisiae</i>	LTA KP L L VFLDEPTSGLDSQTAWSI CQL-----MKKLA-NHGQAI LCTI HQPSA-I LMQEFDRL LFMQRG-----GKTVYFGD L GEGCKT-----M I DYFESHGAHKCPADANPAEWM-----LE
Snq2p <i>Saccharomyces cerevisiae</i>	LVAKPDLLLFLDEPTSGLDSQSSWA I I QL-----LRKLS-KAGQSI LCTI HQPSA-TLFEEDRL LLLLRKG-----GQTVYFGD I GKNSAT-----I LNYFERNGARKCDSSENPAEYI-----LE
Cdr1p <i>Candida albicans</i>	LVAKPKLLLFLDEPTSGLDSQTAWSI CKL-----MRKLA-DHGQAI LCTI HQPSA-L I MAEFDRL LFLQKG-----GRTAYFGELGENCQT-----M I NYFEKYGADPCKEANPAEWM-----LQ
PMR1 <i>Penicillium digitatum</i>	LAAPQLLLFLDEPTSGLDSQTSWS I LDL-----IDTLT-KHGQAI LCTI HQPSA-MLFQRFDRLLFLAKG-----GRTVYFGE I GEHSST-----LSNYFERNGAPKLSPEANPAEWM-----LE
ABC1 <i>Magnaporthe oryzae</i>	LAAPPLLLFVDEPTSGLDSQTSWA I LDL-----LEKLT-KSGQAI LCTI HQPSA-MLFQRFDRLLFLAKG-----GKTVYFGD I GENSKI-----MTDYFERNGGFPCPHDANPAEWM-----LE
ABC2 <i>Magnaporthe oryzae</i>	LAAPPELLLFLDEPTSGLDSQSAFNI VRF-----LKKLA-NAGQAI LCTI HQPNS-ALFENFDRLL L LQRG-----GRCVYFGD I GKDANV-----LRDYLKRHGAEASP-TDNVAEYM-----LE
ABC3 <i>Magnaporthe oryzae</i>	I VKQPK I L I -LDEATSA I DVRSEQ I VQAA-----LERAS---RGRTTVVI A HRLGT---VKKADK I I VLSKGQVVQEGTHDELRRQRGSAYYM-----LANAQSLNVRRRSSRMS I DQTPDEEDDSGYFRTTSMHDGSD
ABC4 <i>Magnaporthe oryzae</i>	LTGGSAVCC-VDEVSSGLDPLSRRKI WD I-----LLAERGKRTMI LTHFLDEADL---ADHI AVL SKGTLRAEGSSVELKNRLGGGYRI HFLKTKTLQDGPVVEGVTKKVSFDI I SY I APSSALAAEVI RTLEAHD-----IR
MoABC5 <i>Magnaporthe oryzae</i>	LYSRAPLL I -LDNTFQALDSRTEAT I RDRL LAPTSGWAA-RHGTTVMLATTSCDN-VLLGQADQVVVLQDN-----GKM-----VPREASTL-----LF
CaABC1 <i>Colletotrichum acutatum</i>	VVSNPK I LL-LDEATSALDTKSEGVVQAA-----LEVAS---QGRTT I TI A HRLST---I KDAHN I VVMSSGRI VEQGTHNDLLAKQGAYYNL-----VTAQNI ARVNEMDAEEEEAI DAEDDEI-----IR
MoABC7 <i>Magnaporthe oryzae</i>	VYSNSKHLL-LDDCLSAVDSHTAQWIFNN-----C I RGPLMKDRTC I MVTHNIP---LCVPHSDFVVMDNGRI THQ-GRALEVI TSGALGEE-----I AQKAKSETPNI SR I PSRV-----PS
MoABC-R1 <i>Magnaporthe oryzae</i>	I ATRKDI VL-LDDVF SALD RTTKHH I ATRL L GP-EGLLR-RLGTTVL FATHDSSI ANL---ADQVYE I TVD-----G I LTPV-----LVQ---KPADDEGTHKEDSDAKYT-----VT

BcatrA <i>Botrytis cinerea</i>	TAAKGGKRRDGKKINWNEEWLNSNENKTVMQE IAR-----IKSERGK IAAPE-----ASSQREFASPVTL
BcatrB <i>Botrytis cinerea</i>	VVSGTLSK GK---DWNQVW LNSPEY EYTKELDR-----I IETAAAAPPGT-----VDDGFEFATPLWQ
FgABCC15 <i>Fusarium graminearum</i>	ETVAAT-----MPVPLTAFSTVSI GH-----LEAESRSTGD-----AKVYRHYYSVN-
FgABCC9 <i>Fusarium graminearum</i>	ETTA IEEKREEVEKPIDGDEPTADEKKKKKKKGAA-----LMTQEERASASVS-----WSVYGAY I KASGS
FgABCG6 <i>Fusarium graminearum</i>	V IGAAPGSHTDI--DWHQTWRDSSEYQAVQTELQR-----LKAEGSANSVDQKSD-----PESYREFAAPFGQ
FgABC1 <i>Fusarium graminearum</i>	V IGAAPGSHTDI--DWHQTWRDSSEYQAVQTELQR-----LKAEGSANSVDQKSD-----PESYREFAAPFGQ
FcABC1 <i>Fusarium culmorum</i>	V IGAAPGSHTDI--DWHQTWRDSSEYQAVQTELQR-----LKAEGSANGVDEKSD-----PESYREFAAPFGQ
AtrB <i>Botryotinia fuckeliana</i>	VVSGSLSQGR---DWHEVWKASPEHTNAQKELDR-----I ISEAGSKPPGT-----VDDGHEFAMPLWQ
AtrA <i>Botryotinia fuckeliana</i>	VVNAEVNDHGT---DWFDVWKSKECQAVKEE IER-----I HEKKRGTAGA I EETDD-----GSTKSEFADA I LV
Pdr5p <i>Saccharomyces cerevisiae</i>	VVGAAPGSHANQ--DYFEVWRNSEEYRAVQSELDW-----MERELPKKGS I TA-----AEDKHEFSQS I I Y
Snq2p <i>Saccharomyces cerevisiae</i>	A I GAGATASVKE--DWHEKW LNSVEFEQTK EK VQD-----L I NDLSKQETKSEV-----GDKPSKYATS YAY
Cdr1p <i>Candida albicans</i>	VVGAAPGSHAKQ--DYFEVWRNSEEYQAVREE I NR-----MEAELSKLPRDND-----PEALLKYAAPLWK
PMR1 <i>Penicillium digitatum</i>	V IGAAPGTHSDI--DWPAVWRESPERKAVQNHLAE-----LRNNLSLKPVATTDND-----PAGFNEFAAPFAV
ABC1 <i>Magnaporthe oryzae</i>	V I GASP GTTSDI--DWHQAWRESPECADVHAELDR-----LKEQVPNTPPPTED-----KASYREFAAPFHQ
ABC2 <i>Magnaporthe oryzae</i>	AVGAGSAPRVGDR--DWADI WEESPEHANVKDT I SQ-----LKEERKAEVANDSN-----SALEKEYASPI SH
ABC3 <i>Magnaporthe oryzae</i>	HTAHSSNYGSDEEDDF I MERPRVRARDDVGVEMSTST I-----HTAHTPVSDGPPDDAAK I QVVE I QDHWLGGFAELLA EQGS
ABC4 <i>Magnaporthe oryzae</i>	DYRFSGPT I EDVFLQLAEEVKGETDAASRGSHLASASLQGANA EKYSSSEMVTPDADKDNLEMSGNKVG I PRQALVLFKRKCTVFKHNWFP SFAAF I I P I LAAGLCTLF I RGQSPAGCSTQETRSGQD I FSNDDNDGNSLLLLYGPTSP
MoABC5 <i>Magnaporthe oryzae</i>	SEEQSPPKNEQ IQQQPVEQARPKLNKPDALNDKKT-----PPTQPAASKESKT-----ASTYRFFFGPVG-
CaABC1 <i>Colletotrichum acutatum</i>	KASRASDKGYVA--DPEDNMAAKLQRTNTSKSLSS-----I ALQNRKDDGEVKYSL-----WTL I KL I ASFNQK
MoABC7 <i>Magnaporthe oryzae</i>	SVGEGSGNTLLD--TDGDDHLSKPKNAKKAKKAE A-----MEETKATGAVK-----WPVMKLYLASMGS
MoABC-R1 <i>Magnaporthe oryzae</i>	DASNDEKTST-----APDHGTNTVMTHK-----VENGGEATGTSVSD-----KKVYLRYARAMG-

BcatrA <i>Botrytis cinerea</i>	QTTELTKRLFTQY-----WRDPS-----YLY-----GKLFTSVIIIG--IFNGFTFWQLGHSIID-----MQNRMFTSF
BcatrB <i>Botrytis cinerea</i>	QIKLVTNRMNVAI-----YRNTD-----YIN-----NKFALHIGSA--LFNGFSFWMIKHSVGG-----LQLRLFTVF
FgABCC15 <i>Fusarium graminearum</i>	-GWATMTCLLSGIMYAVGRNFPSIWM-G--WWGSN-----SFDRTSSFYIG-----IMG--LFRGLQIIISLFLCATA-----VVIFMTTQSGKLLHSEIINTLVNAPL
FgABCC9 <i>Fusarium graminearum</i>	-ILNAPLVLFLLIISQGANI VTSLWL-S--YWTSD-----KFNLTSGVYIG-----IYAALGVVQAI--LMFAFSVVLISLGTSK-----SKVMLRIAVTRVLRAPM
FgABCG6 <i>Fusarium graminearum</i>	QLLIATKRVFEQY-----WRTPS-----YIY-----SKAALCIQVG--LFLGLVFLNAPLSLRG-----LQNQMFAIF
FgABC1 <i>Fusarium graminearum</i>	QLLIATKRVFEQY-----WRTPS-----YIY-----SKAALCIQVG--LFLGLVFLNAPLSLRG-----LQNQMFAIF
FcABC1 <i>Fusarium culmorum</i>	QLLIATQRVFQQY-----WRTPS-----YIY-----SKAALCIQVG--LFLGLVFLNAPLSLRG-----LQNQMFAIF
AtrB <i>Botryotinia fuckeliana</i>	QTVIVTKRTCLGV-----YRNTD-----YVN-----NKLALHIGSA--LFNGFSFWKMGASVGE-----LQFKFLVLF
AtrA <i>Botryotinia fuckeliana</i>	PAVCRHVRVFQQY-----WRMPE-----YII-----SKGALAI VAG--LFIGFSFYDAKTSLAG-----LQTLVFSLF
Pdr5p <i>Saccharomyces cerevisiae</i>	QTKLVSIRLFQQY-----WRSPD-----YLW-----SKFILTIFNQ--LFIGFTFFKAGTSLQG-----LQNQMLAVF
Snq2p <i>Saccharomyces cerevisiae</i>	QFRYVLIRTSTSF-----WRSLN-----YIM-----SKMMLMLVGG--LYIGFTFFNVGKSYVG-----LQNAMFAAF
Cdr1p <i>Candida albicans</i>	QYLLVSWRTIVQD-----WRSPG-----YIY-----SKI FLVVSAA--LFNGFSFFKAKNNMQG-----LQNQMFVSF
PMR1 <i>Penicillium digitatum</i>	QLWQCLIRVFSQY-----WRTPI-----YIY-----SKTALCSLTA--LYVGFSFFHAQNSMQG-----LQNQMFSIF
ABC1 <i>Magnaporthe oryzae</i>	QIYAVTHR VFQY-----WRTPS-----YIY-----AKAALCAVTA--LFIGVFYDAPNTQQG-----LQNQMFAIF
ABC2 <i>Magnaporthe oryzae</i>	QLKVTSRHTNLAL-----WRSPN-----YLF-----TRLFNHVVIA--IVTGLTYLQLDNSRSS-----LQYKVFIMF
ABC3 <i>Magnaporthe oryzae</i>	RWKLYFVIIIGAI GAGASTPVQAYLF-ATLLNLSFRGPQ-----VNQLANFFCL-----MFVVLAAAGVGISHLFLGWSTTRLGFGLTR-----FYRKEYFKNMISRPA
ABC4 <i>Magnaporthe oryzae</i>	TITAALNRTIALIRNGPGDSTGSSAG-S-----PNGGQSSSLFNIESATSFADFNRGIIDNRKNVTPAGFWLGD TNNPPTLAYTSVPEMQN--AFFGQNLNMMLLTNTLSAKYAAFD-----PWQDNTGNSLQLLVYICLALS
MoABC5 <i>Magnaporthe oryzae</i>	-FFRLAVLVLGVISLAVLTRIQRIWV-Q--WWTEA-----SSRD RYPTFVG-----VYFTFAVGGC--TSFAFVFWWLFMSVTP-----ITAGGLHQQLVSTIFSAPL
CaABC1 <i>Colletotrichum acutatum</i>	EWKLMLIGLLFSIICGGGNPTQAVFFAKQIMT LSVPI TPQ-----TTQETLHQMKKDSDFWSA-----MYLMLAGVQFIAFVIQGI AFAKCSERLIH-----RVRDQAFRTMLRQDV
MoABC7 <i>Magnaporthe oryzae</i>	-WWFWV VAGCIFI SQQASDVVSNLWI-K-----QWASQYTTEVSSVPISTSSHMYGTQSFAPTYMVPVQTYVKDQLARNG-NATALDIVVN--SEVNAQYYLVVLAII GLAGSLTAFLRDLWIFFGSLTASAKI HTRLLNTVTRAKF
MoABC-R1 <i>Magnaporthe oryzae</i>	-FKNAATFLFLVMGCAVCFKIPDLWV-Q--WWSTA-----IKQGT TSYSSYWIG-----ILALLEVLPL--LMLWLSLFHVLFFIVP-----RSASTMHDSLLRTVLLAPF

BcatrA <i>Botrytis cinerea</i>	L I I L I P P T I V N A V V P K F Y Q N R A L W E A R E L P S R I Y G W V A F C T A N I-----VAE I P--I A I V-----G A V I Y W A L W Y W-----P T G L P S D S S-----T S G Y V-----F L-
BcatrB <i>Botrytis cinerea</i>	N F I F V A P G V M A Q L Q P L F L E R R D I Y E T R E K K S K M Y S W W A F A T G N V-----V S E L P--Y L V I-----C A V L Y F V C W Y Y-----T V G F P S D S S-----K A G S V L-----F V M
FgABCC15 <i>Fusarium graminearum</i>	R F F T T T D--F G A V T N L F S Q D M T L I D G E L P I S L L N T V I Q I F D V F A-----M A V V V A V G A P--W L A I A Y P V V F S I Y M L Q M F Y L R T S R Q L R L L D L E A K S P L Y A H F L D T I R G I A T V R A Q K L R D Q E I L F N Q-D L L N L S Q R P A Y L L-A M A Q R F L A
FgABCC9 <i>Fusarium graminearum</i>	S F F D T T P--L G R I T N R F S R D V D V M D N-----N L S D A L R M F L L T M G M I T S V F I L I I A F Y Y--Y F V I A L V P L Y A F V V A A M Y Y R A S A R E V K R F E S V L R S H V F A K F G E G L T G V A S I R A Y G L Q N R F I N E L R-D S I D E M N G A Y Y I T-F A N Q R W L S
FgABCG6 <i>Fusarium graminearum</i>	Q M L T V F G Q L V Q M Q M P H F V T Q R S L Y E V R E R P S K T Y S W K V F M L S Q I-----I A E I P--W N T L-----M S V F L F V C I Y Y-----P V G F N K N A E F A G Q T A E R G G L M-----W L-
FgABC1 <i>Fusarium graminearum</i>	Q M L T V F G Q L V Q M Q M P H F V T Q R S L Y E V R E R P S K T Y S W K V F M L S Q I-----I A E I P--W N T L-----M S V F L F V C I Y Y-----P V G F N K N A E F A G Q T A E R G G L M-----W L-
FcABC1 <i>Fusarium culmorum</i>	Q M L T V F G Q L V Q M Q M P H F V T Q R S L Y E V R E R P S K T Y S W K V F M L S Q I-----M A E I P--W N T L-----M S I F L F V C I Y Y-----P V G F Q K N A E F A G Q T A E R G G L M-----W L-
AtrB <i>Botryotinia fuckeliana</i>	N F I F A A P G G I G Q V Q A L F I E R R D I Y D A R E K K S R I F S W V G F V T G L I-----V S E L P--Y L V L-----C A V L Y F V C F Y Y-----Q T G L P T S S D-----K A G A V-----F F-
AtrA <i>Botryotinia fuckeliana</i>	M V C A L F A P L V N Q I M P L F I T Q R S L Y E V R E R P S K A I P G K L P D C N I L-----V E I P--Y Q V L-----M G I L T F V C Y Y Y-----P L S V P A K D Q-----T E R A L-----V L L
Pdr5p <i>Saccharomyces cerevisiae</i>	M F T V I F N P I L Q Q Y L P S F V Q Q R D L Y E A R E R P S R T F S W I S F I F A Q I-----F V E V P--W N I L-----A G T I A Y F I Y Y Y-----P I G F Y S N A S A A G Q L H E R G A L F-----W L-
Snq2p <i>Saccharomyces cerevisiae</i>	I S I I L S A P A M N Q I Q G R A I A S R E L F E V R E S Q S N M F H W S L V L I T Q Y-----L S E L P--Y H L F-----F S T I F F V S S Y F-----P L R I F F E A S-----R S A V Y-----F L N
Cdr1p <i>Candida albicans</i>	M F F I P F N T L V Q Q M L P Y F V K Q R D V Y E V R E A P S R T F S W F A F I A G Q I-----T S E I P--Y Q V A-----V G T I A F F C W Y Y-----P L G L Y N N A T P T D S V N P R G V L M-----W M-
PMR1 <i>Penicillium digitatum</i>	M L M T I F G N L V Q Q I M P H F V T Q R S L Y E V R E R P S K T Y S W Q A F M S A N I-----L V E L P--W N A L-----M S V L I F L C W Y Y-----P V G L Q R N A S-A D D L H E R G A L M-----W L-
ABC1 <i>Magnaporthe oryzae</i>	N I L T V F G Q L V Q Q T M P H F V I Q R D L Y E V R E R P S K V Y S W K V F M L S Q I-----I V E I P--W N S L-----M A V I M F F C W Y Y-----P V G L E R N A I L A D Q V T E R G A L A-----F L-
ABC2 <i>Magnaporthe oryzae</i>	Q V T V L P A L I L S Q V E A M Y H V K R G I F-F R E S S S K M Y N T S A F A A S M L-----L A E L P--Y V V L-----C A V A F F L P L Y Y-----M P G F T Y D S S-----R A G Y Q-----F L-
ABC3 <i>Magnaporthe oryzae</i>	S F F D E E D H T V G S L T A R L A T D P T Q L Q Q L L G V N M A F V L V S I F N V I G--C C I V G F V G W K--L T I V S L A S T M P I I V V A M A Y R V R H E V R L E A E A S K V F A E G A R F A S E I A A I R T V S S L T M E D G V G T R Y E-E L L N K H V R Q A----F S K A R W S L
ABC4 <i>Magnaporthe oryzae</i>	A Y P A F F A L Y P N V E R R R F V R G L Q Y S N G V R Q F P L W I A Y V L F D F I N V V I S S A I V I G L F V A I A D V W Y H A G Y L F L I L V L Y G L C A I L L S Y N-----I S I F A S N Q L S A Y A F A A G F N A V T F L V Y L I G Y M A T I T F A R V D R V D S S L L V V N F V S A F A P
MoABC5 <i>Magnaporthe oryzae</i>	S Y F S G I D--S G I I L N R F S Q D M A V L N G M L P I S I F Q T T S T G A L I I G--Q L A L I-M Y G A N--Y M S I S L P F T I L A L W L L A N F Y L R T S R Q L R V L E L E L K A P I Y T L L T E T M E G L S T I R A F G W Q S W Y L G R C H-V R V D G S K R A I Y L L-F M I Q R W L G
CaABC1 <i>Colletotrichum acutatum</i>	A F F D K D S N T A G A L T S F L S T E T T H A G L S G V T L G T L L M V T T T L V A--A L A L A I A I G W K--L A L V-C T A T I P I L I G C G F F R F W M L A H F Q R R S K T A Y S N S A S Y A S E A I S A I R T V A S L T R E D D V I R Q Y Q T S L A I Q Q R A S-----L I S
MoABC7 <i>Magnaporthe oryzae</i>	R F F D V T P--L G Q M M N R F S K D M E A V D Q E V A P I A I G I L S C A L G I T V----T V V L I A S I T P--G F L I A A V F I T I A Y V L L A K F Y L A S S R D L K R L E S V Q R S P L F Q Q F G E T L S G V T T I R A Y G D E R R F V R D N L-T R I N G Q L R P M I Y L-W A T N R W L A
MoABC-R1 <i>Magnaporthe oryzae</i>	G F I S R V D--T G S L M N R F N Q D L M F V D T R L P I D L F N T S I D F F I T I I--Q L I L V V L V S K E--A L A I L-P V V F G A L Y L I Q K V Y L R S S K Q L R L L D L D W K A D L H T A F G E T T A G L S V I R A N G W L D P M R A K F A-E K L D R S Q E P F Y L L-Y M V Q R W L Q

BcatrA <i>Botrytis cinerea</i>	MTMLFFLFQASWGQWICAFAPSFTVINSVL-----PFFFVMFGLFNGVV-----RPYSQIS--VFWRY-----WLYYVNPATY-----WIG
BcatrB <i>Botrytis cinerea</i>	ICYEFI--YTGIGQFVAAYAPNVVFASLVN--PLVIGTLVSFCGVL-----VPYAQIT--EFWRY-----WMYVLNPFNY-----LMG
FgABCC15 <i>Fusarium graminearum</i>	TFLNLI VMVLAVGVVAISTQLRTN--SGFA--GSSLVTLSWGESI--SSLIQYTTQVEVSI GAVSRLKAF-----AQNVPSENLDQEDLEPA--EEWPTQGD-----IAIRGVSASYKNDDSEPTSEDDE
FgABCC9 <i>Fusarium graminearum</i>	MRIDLIGVLLVFVTAI LVTSTRFSINPSIG--GLVLSYILSIVGMM--QFSVRQLAEVENAMNAVERLYYY-----GTELEEEAPSHTEVRKSWPEKGE-----IVFDNVEMRY-----R
FgABCG6 <i>Fusarium graminearum</i>	LIWQFLIFTCTFAHAAIAITDTAEAGGNLA--NVVFMMSLFFCGVL-----AAPDKMP--GFWI-----WMYRVSPFTY-----LVS
FgABC1 <i>Fusarium graminearum</i>	LIWQFLIFTCTFAHAAIAITDTAEAGGNLA--NVVFMMSLFFCGVL-----AAPDKMP--GFWI-----WMYRVSPFTY-----LVS
FcABC1 <i>Fusarium culmorum</i>	LIWQFLIFTCTFAHAAIAITDTAEAGGNLA--NVVFMMSLFFCGVL-----AAPDKMP--GFWI-----WMYRVSPFTY-----LVS
AtrB <i>Botryotinia fuckeliana</i>	VMLLYEGLYTGIGQFISAYAPNAVFATLTN--PLVIGTLVSFCGVL-----VPYGGIQ--EFWRY-----WIYVLNPFNY-----LMG
AtrA <i>Botryotinia fuckeliana</i>	FCIQFYVYASTFAHMCIAAMPNAETASPIV--ILLFSMCLTFCGVM-----QPPDALP--GFWI-----FMYRVSPFTY-----WVA
Pdr5p <i>Saccharomyces cerevisiae</i>	FSCAFYVVYVGSMLLVISFNQVAESAANLA--SLLFTMSLSFCGVM-----TTPSAMP--RFWI-----FMYRVSPFTY-----FIQ
Snq2p <i>Saccharomyces cerevisiae</i>	YCI MFQLYYVGLGLMILYMSPNLPSANVIL--GLCLSFMLSFCGVT-----QPVS LMP--GFWT-----FMWKASPTY-----FVQ
Cdr1p <i>Candida albicans</i>	LVTAFYVYTATMGQLCMSFSELADNAANLA--TLLFTMCLNFCGVL-----AGPDVLP--GFWI-----FMYRCNPFTY-----LVQ
PMR1 <i>Penicillium digitatum</i>	LILTFMLFTSTFSHMMIAGIELAETGGNLA--NLLFSLCLIFCGVL-----ATPDKMP--HFWI-----FMYRVSPFTY-----LVS
ABC1 <i>Magnaporthe oryzae</i>	YLWGFLIFTSTFDLMIAGFETAEGGNIA--NLFFSLCLIFCGVL-----ANPDTMP--RFWI-----FMYRVSPFTY-----IVS
ABC2 <i>Magnaporthe oryzae</i>	MILITEFFSITLAQALSSI TPSTFISSQLD--PFLMITFSLFCGVT-----IPFPQMP--DGYK-----WLYQLDPFTR-----LIG
ABC3 <i>Magnaporthe oryzae</i>	LLFSF--SDSISFLCMAFVLWYGGRLLASRE--YSPFQYVIVYIAVVGQAMSAGQWLSFGPNI AHATAADR-----VLDMREADELDRGLPLIDPNEDAMLEEKGAE--VELRDVWFSY-----P
ABC4 <i>Magnaporthe oryzae</i>	IGSAVRGFFIALNLFSTTCQDQELAPNPGGFLQYGSPIMYLIQAILL--FLLLLWLDSGTIRATWQRLFGRKNKNANQQAADISDEEVAGELVRVTSSATDPSRRRQ--DTKGADGVSSSDKDG--LQVVHVTKTF-----
MoABC5 <i>Magnaporthe oryzae</i>	FVL DCTVAALATLMVILATQLRESTNSASL--GVGLSSVIGFSVLV--AQLVATYTEVENSLGAVDRIDC-----VEMVPSEEDSRLVQPP--AEWPTRGH-----LEFRNVAAGY-----TGKD
CaABC1 <i>Colletotrichum acutatum</i>	ILKSSLLFAASQSFMLAFALGFWYG GTLIANGEYNMFQFFVCFSAVIFGAQSAGSIFSFAPDMGKAHQAA NELK-----ILFDRKPTIDTWSKEGASLDAVDGTLEFRDVHFRY-----PT
MoABC7 <i>Magnaporthe oryzae</i>	FRTDLLGDFVSFFAGVFVILSIGVIDAGWA--GISLSYIIGAENI--LWLVRLYSINEQNMNAVERIKEY-----LEVEQEAAPICEKNRPP--QNWPAQGS-----VEFINYTTSY-----R
MoABC-R1 <i>Magnaporthe oryzae</i>	LVLNLVAGLAIAGVAIGLRDKVAAGAV--GVALLNTTTLGETL--TNFIMSWTSLETSLGAIRVCTF-----EQDTPREEREPESTDLP--DNRPGAGQ-----ISFENVWATY-----EDEG

Walker A: GxSGxGKS

BcatrA <i>Botrytis cinerea</i>	G I I A A T L S N V P I E C A S N E A A Y F N P P S G Q T C S S Y A-----S D F V T-----S A G V G Y L T---N P D A T T N-----C G Y C-----
BcatrB <i>Botrytis cinerea</i>	S L L V F T S W D T P V N C H E S E F A I F N P A N G-T C G E Y L-----S S Y L Q G M-----G A A A N L I---N P D A T E G-----C R V C-----
FgABCC15 <i>Fusarium graminearum</i>	E S P N L A L E D L T I L V K P G Q K V A L C G R T G S G K S S I I L L L L R L L D P L S N Q S E N I V I D G V P Y N R V N R S I L R R R L I A V P Q D P V F L P D G S S I K E N L D P F N V A S-----D E E C L A V L E D V R L T K F A T D H G S I-----
FgABCC9 <i>Fusarium graminearum</i>	A G L P L V L S G L T M H V K G G E R I G I V G R T G A G K S S I M S T L F R L V E---I S G G K I T I D G L D I S T L G L H D L R S R L A I I P Q D P T L F R G---T V R S N L D P F S E H T-----D L E L W Y A L R K A D L V S A D A E T P E D-----A R R T N D P S R
FgABCG6 <i>Fusarium graminearum</i>	A I L S T G I A N A E V K C A A N E L T T F N P T N G T T C G E Y M-----N S Y I K-----A A G G Y L T---N P D A T S D-----C K F C-----
FgABC1 <i>Fusarium graminearum</i>	A I L S T G I A N A E V K C A A N E L T T F N P T N G T T C G E Y M-----N S Y I K-----A A G G Y L T---N P D A T S D-----C K F C-----
FcABC1 <i>Fusarium culmorum</i>	A I L S T G I A N A E V K C A A N E L T T F N P P N G-T C G D Y L-----E S Y I K-----A A G G Y L T---N P D A T S D-----C K F C-----
AtrB <i>Botryotinia fuckeliana</i>	S L L T F T I F D V D I K C R E S E F A T F D P P N G S S C I D Y L-----S T I F K G W-----G V S A N L I---N P D A T S Q-----C Q V C-----
AtrA <i>Botryotinia fuckeliana</i>	G M A T T Q V H G R E V V C G E N E L S I F D P P T N Q T C G Q Y M-----E R Y I S-----V A G G Q V L---N P S A T A G-----C E Y C-----
Pdr5p <i>Saccharomyces cerevisiae</i>	A L L A V G V A N D V K C A D Y E L L E F T P P S G M T C G Q Y M-----E P Y L Q-----L A K T G Y L T---D E N A T D T-----C S F C-----
Snq2p <i>Saccharomyces cerevisiae</i>	N L V G I M L H K K P V V C K K K E L N Y F N P P N G S T C G E Y M-----K P F L E-----K A T G Y I E---N P D A T S D-----C A Y C-----
Cdr1p <i>Candida albicans</i>	A M L S T G L A N T F V K C A E R E Y V S V K P P N G E S C S T Y L-----D P Y I K-----F A G G Y F E T R N D G S-----C A F C-----
PMR1 <i>Penicillium digitatum</i>	A M L S T G T S G A K V E C E S V E L L H F E P T A G K T C F E Y M-----N T Y M N G L V V N G T Q V A A P A G G Y L V---D N N A T S N-----C A F C-----
ABC1 <i>Magnaporthe oryzae</i>	G L L S V A N S E V R C A S N E F L H F D P L N G-T C A E F M-----R N Y I N G T T I P G L G R I P G A G G Y L R-P D T E S S R S N-----C A F C-----
ABC2 <i>Magnaporthe oryzae</i>	G M V T T A L H D L D V K C A S I E L N K F T P A N G S T C E E Y M-----R P F F N-----A G G N G Y I V---D P S S T A Q-----C D Y C-----
ABC3 <i>Magnaporthe oryzae</i>	T R P G T I L K G L D I K V E R G Q F A A I V G P S G S G K T T V I S L L E R F Y G---A D S G Q V L Y N G H D V L D L E P S A Y R S N V S L V A Q E P H L L S G---S M R D N V-L L G I E D E---S T V V H A D I Y A A C Q E A G L H D F I S S L P E G-----
ABC4 <i>Magnaporthe oryzae</i>	-G K N T A V D N V T F G V K H G E V F A L L G P N G A G K S T S L N M I R G D L Q P---S P G G D V F V E G V S V S K-Q L A A A R A N L G V C P Q Y D A I D V M---T V T E H L R F Y A R V R G---I A D V D R Q V E A V I R A V G L E L F R D R Q A F-----
MoABC5 <i>Magnaporthe oryzae</i>	G V T T K V I Q D L T F S V E P G Q K V W L C G R T G S G K S T I L N L L L R L M D---A S S G E I L V D G E D M A R I S P S A V K K A F A V I P Q S P F F L P G-T T V R I S L G L Y A S S E G D L A Q I P D E E M I S V L N E V G L W D H I R S Q A G E-----
CaABC1 <i>Colletotrichum acutatum</i>	R P E Q P V L R G L N L V I R P G Q Y V A L V G A S G C G K S T I A L L E R F Y D---P L S G A I F V D G K E I S T L N V N E Y R S F I A L V S Q E P T L Y Q G---T I K E N I-L L G A H T E-----V T D E A I E F A C R E A N I Y D F I V S M P E G-----
MoABC7 <i>Magnaporthe oryzae</i>	K E L D P V L R N V T F K I S P Q E K V G I V G R T G A G K S S L A L A I F R A L E---A D G G K I L I D G I D I G L I G L R D L R E A I T I V P Q E P T L F T G---T I R S N L D P F H L F T-----D E Q I Y K S L Q R V Q L I G P D E T I P T A D A S P V L P A S P T T P G G A S N K N I F
MoABC-R1 <i>Magnaporthe oryzae</i>	C G S N W G L S G I T L A V Q P G E R V A V C G R T G S G K S T L L L A L L G M L H---T P A G S I R I D G V D T S T L P I D V L R R R F T V V S Q D S F F E P T-S T F R Q E L D P S G D M S-----D Q I I E E V L R E C R A W E I V D G S G G L-----G G K R A D A---

BcatrA <i>Botrytis cinerea</i>	-----PYASGEEYMKTLNVT-PQD-----KWRNFGIFLAFCISNWLAVY--FFIYTVRIRGWSFGFATLFGGLGKM-----VGKVKSAFKGKEKKSVTESK-----
BcatrB <i>Botrytis cinerea</i>	-----EYTVGNDYLKGLNLKTYSY-----GWRDAGICALF---VFSGY-GLVFLLMKLRTKKTKGAE-----
FgABCC15 <i>Fusarium graminearum</i>	----HAGIRADELSAGQKQLFSLGRAVLRRRVKQRLFSIHGGVLLDEVSSSVDSATDNLVQEIIKEEFADYTI VMVSHRLNIVMEYFDSVVVLDGRVETGDPRDLAKTEGSWFSQLWAMEKNLVLLSRTQHLRLQCLNLANSPRAS
FgABCC9 <i>Fusarium graminearum</i>	IHLDTAVEEDGLNFSLGQRQLMALARALVRG-----AQIIVCDEATSSVDMETDDKI QATMAVGFRGKTLLCIAHRLRTIIIGY-DRICVMDTGRIAELDTPLQLWKQGGIFRSMCDRSGIRMDIHGAREELSSAVGESSRQ---
FgABCG6 <i>Fusarium graminearum</i>	-----TIKSTNVYLKALSAS-YDD-----RWRNFGIGMVYIVVNI VGAL--FLYWLIRMPKNK-----NKKKTA-----
FgABC1 <i>Fusarium graminearum</i>	-----TIKSTNVYLKALSAS-YDD-----RWRNFGIGMVYIVVNI VGAL--FLYWLIRMPKNKNKKKTA-----
FcABC1 <i>Fusarium culmorum</i>	-----TIKDTNVYLKALSAS-YDD-----RWRNFGIGMVYIVVNI VGAL--FLYWLVRMPKNKNKKKA-----
AtrB <i>Botryotinia fuckeliana</i>	-----QYTRGSDYLYSLNLKDYYY-----GWRDTAIVALFVLSSYA---LVYGLMKLRRTKA-----SKKAE-----
AtrA <i>Botryotinia fuckeliana</i>	-----SLTVADEYLAASQIY-WSD-----RWRNFGLIWVYIGFNI FVAT--AVYYLFRVKKNW-----GRRKK-----
Pdr5p <i>Saccharomyces cerevisiae</i>	-----QISTNDYLANVNSF-YSE-----RWRNYGIFICYIAFNYIAGV--FFYWLARVPKKN-----GKLSKK-----
Snq2p <i>Saccharomyces cerevisiae</i>	-----IYEVGDNYLTHISSK-YSY-----LWRNFGIFWIYIFFNI IAMV--CVYYLFHVRQSSFLSP-----VSI LNKIKNI RKKKQ-----
Cdr1p <i>Candida albicans</i>	-----QMSSTNTFLKSVNSL-YSE-----RWRNFGIFIAFIAINI ILTV--IFYWLARVPKGN-----REKKNKK-----
PMR1 <i>Penicillium digitatum</i>	-----TIADTDYLASVLSY-YKD-----AWRNFGIMWAFIIFNIFGAV--CIYWLARVPKGT-----RSKKTCTA-----
ABC1 <i>Magnaporthe oryzae</i>	-----PIKDTNIFLQGAHAN-YND-----RWRNFGLIFVYIIFNIIAAL--FVYWAVRVPKKKLGKDAAGVGAG-----AGAARASASNEKGKMQREKGE
ABC2 <i>Magnaporthe oryzae</i>	-----AYSSGDQFYTPLGMT-FDN-----RWRDLGIYLAFCASNIV----IIFVANRFLNFNKR-----
ABC3 <i>Magnaporthe oryzae</i>	---YSTEVGARGVALSGGQKQRLSIARALIRR-----PALLLLDEATSALDSETERAVQETFEATKGSRTMIVVAHRLATVKNA-DVIFVMADGKVEQG-----DHVSLLERRGVYYEMCGSQALDR-----
ABC4 <i>Magnaporthe oryzae</i>	-----ALSGGNKRKLSLGI ALMGN-----PSVILLDEPSSGLDAAAKRIMWRTLAGTVPGRSILLTTHSMEEADALAGRVGILAK-RMLAMGSADNLRHFRGD-----LLHVHIVLKGAPRTSDADAERVNRNIVQT
MoABC5 <i>Magnaporthe oryzae</i>	---LGLGLNMDKLPLSHGQRQLFGFAMTMLKV---KRQ---GSKIVLMDEPASGCDQETMMEMSALIRRAFESCTVLAVTHSSDIISEY-DMVVSLDN-----
CaABC1 <i>Colletotrichum acutatum</i>	---FNTVVGSKGALLSGGQKQRI AIALALIRD-----PKILLDEATSALDSESEHVQAALDKAAGRTTIAVAHRLSTIQKA-DIIYVFDQGRIVEQG-----THAELMKKNGRYAELVNLQSLEKNS---
MoABC7 <i>Magnaporthe oryzae</i>	LNLSSKVSESGSNLSQGQRQLLCLARALLKE-----PRVLVMDEATASIDYATDSKI QDTIR-EMKDTTIIITIAHRLQTIADY-DKVLVLDKGEVVEYAHWPWELMRKGEG-----GSFKSMCDMSGDTELLAKAAKKAFAKAKL
MoABC-R1 <i>Magnaporthe oryzae</i>	-----NLSAGEVQLLIAARLVLQWQSQPAG---SGGIILLDEATSNLDRQTEVLVESIMAAARLQHATVVSVMHRLAFAAAY-DKVAVLDKGVLVDFG-----PVTVMARCELF TG-----

BcatrA <i>Botrytis cinerea</i>	-----
BcatrB <i>Botrytis cinerea</i>	-----
FgABCC15 <i>Fusarium graminearum</i>	I SYKYSNYLASELHSAHRDNTN I LRGLNKKPSGFQLQSLQTYTVEF I RALHKAFFEQATSQSPFCYSRKAVMETAMRVFAWPPSLRL I SSPEDRDLRYTTQTLVRHFTFMDRA I ---
FgABCC9 <i>Fusarium graminearum</i>	-----
FgABCG6 <i>Fusarium graminearum</i>	-----
FgABC1 <i>Fusarium graminearum</i>	-----
FcABC1 <i>Fusarium culmorum</i>	-----
AtrB <i>Botryotinia fuckeliana</i>	-----
AtrA <i>Botryotinia fuckeliana</i>	-----
Pdr5p <i>Saccharomyces cerevisiae</i>	-----
Snq2p <i>Saccharomyces cerevisiae</i>	-----
Cdr1p <i>Candida albicans</i>	-----
PMR1 <i>Penicillium digitatum</i>	-----
ABC1 <i>Magnaporthe oryzae</i>	VEGLTTAVLGTSVAGSDAPMTTTTEGEGERAKRRTSGDEVVR-----
ABC2 <i>Magnaporthe oryzae</i>	-----
ABC3 <i>Magnaporthe oryzae</i>	-----
ABC4 <i>Magnaporthe oryzae</i>	LPGAEVEEKVYHGQLRFSVPASVVSGQKQRTTEGGEGDE I TREGQAAASSRSSQSAVGKLVVMLEENKHLG I EHYAVSPTTLDQVFLT I VGKHNVKEEGYNEDEKPTGWKRLFSTRK
MoABC5 <i>Magnaporthe oryzae</i>	-----
CaABC1 <i>Colletotrichum acutatum</i>	-----
MoABC7 <i>Magnaporthe oryzae</i>	I DVDDEAADAAP-----
MoABC-R1 <i>Magnaporthe oryzae</i>	-----