

		10	20	30	40	50	60
serpula_lacrymans_5/1-229	1	M-----	KSITLLSIAA-VLLPSVSAHYRWTS	SL---	VVGS-TITTA-YEYVR	----	40
schizzophyllum commune_15/1-228	1	M-----	RVPTL-LAAA-PLATTALAHYTLFVL	----	VVNG-EPSGE-WVNIR	----	39
schizzophyllum commune_16/1-228	1	M-----	RLSSL-IATA-SLAASALAHYTLPTL	----	IVNG-QPSGE-WVNIR	----	39
chaetomium_globosum_8/1-223	1	M-----	LTTT-FALL-GAALGASAHYTLFVKV	----	SGSG-DW----	QHVRRRA	36
pyrenophora_trici_repentis_13/	1	M-----	KTSA-LLIA-AGATLASAHYTLPSI	----	NGDG-TW----	VHVRQA	36
pyrenophora_teres_11/1-209	1	M-----	KTSA-LLIA-AGATLASAHYTLPSI	----	NSDG-TW----	VHVRQA	36
Phaeosphaeria_nodorum_18/1-21	1	M-----	KTST-VLLA-AASVASAHYTLPIV	----	NGDS-AW----	THVRQA	35
podospora_anseria_18/1-223	1	M-----	LASL-ALVL-STALSATAHYTLFRLV	----	GNGA-DW----	QHVRRRA	36
thievela_terestis_18/1-224	1	M-----	MLANGA-IVFL-AAALGVSGHYTWPRV	----	NDGA-DW----	QQVRKA	37
myceliophthora_thermophilia_21	1	M-----	LTTT-FALL-TAALGVSAHYTLFRLV	----	GTGS-DW----	QHVRRRA	36
TYPE1:NCU03328/1-229	1	M-----	LPST-SLLL-AAALGTSAHYTFPKVWANS	GTTA-DW----	QYVRRRA	----	40
emmericella nidulans_3/1-229	1	M-----	KSGLL-FTTA-SLALTASAHYVFPAL	----	VQDG-AATGD-WKYVRD	W----	41
aspergillus_tereus_4/1-228	1	M-----	KGSYL-LGSA-MLAATSAYHYVFPAL	----	IKDG-EATPD-WKYVRQ	W----	41
podospora_anseria_11/1-231	1	M-----	KASTT-LAV-LAAAGAQAHYTFPGT	----	KYNG-VAQPQ-WDTVRIT	----	40
glomerella_graminic_6/1-230	1	M-----	KFSAV-LVA-LAAASAEAHYTFGR	L----	VYGG-TTYPE-WQYVRKT	----	40
arthrobotrys_oligospora_11/1-1	1	M-----				T----	2
pyrenophora_trici_repentis_20/	1	M-----	KYSLA-ALL-AVASTASAHYTLPEL	----	TVKG-VKTGQ-WAYVRKT	----	40
Phaeosphaeria_nodorum_28/1-22	1	M-----	KTAFI-SLL-AAASTASAHYTFPGF	----	ISGS-TVTSP-WEYVRKT	----	40
myceliophthora_thermophilia_16	1	M-----	KLTS--LAV-LAAAGAQAHYTFPRA	----	GTGG-SLSGE-WEVVRMT	----	40
thievela_terestis_11/1-231	1	M-----	KLTS--VAL-LAAAGAQAHYTFPQT	----	DING-LSGE-WYTIRET	----	40
chaetomium_globosum_24/1-226	1	M-----	KFASS-VAL-LAAAGAQAHYTFPKT	----	VVDG-VTSAE-WETIRIT	----	40
chaetomium_thermophilum_14/1-23	1	M-----	KFTTP-LAL-LAVVGVAHYTFERT	----	KVNG-VLSGE-YETVRLT	----	40
TYPE1:NCU02344/1-232	1	M-----	KFSSA-LAF-LAAAGAQAHYTFPKG	----	YSTG-AVSGE-YEHIRMT	----	40
myceliophthora_thermophilia_2/	1	M-----	KGLLGAALAS-LAVSDVSAHYIFQQL	----	TTGG-VKHAV-YQYIRKN	----	42
sodaria_macrospora_4/1-217	1	M-----	K-LTVAAAL-LAASEASAHYIFQQV	----	GTGT-TVNPT-WKYIRQH	----	40
neurospora_tetrasperma_12/1-21	1	M-----	K-LSVAAALS-LAASEASAHYIFQQV	----	GAGT-SVNPV-WKYIRKH	----	41
TYPE1:NCU00836/1-218	1	M-----	K-LSVAAALS-LAASEASAHYIFQQV	----	GAGT-SVNPV-WKYIRKH	----	41
thievela_terestis_7/1-223	1	M-----	KGLFSAALAS-LAVGQASAHYIFQQL	----	SING-NQFV-YQYIRKN	----	42
podospora_anseria_5/1-221	1	M-----	KVFPIVTALT-LGVADVSAHYIFQQF	----	GVGS-TKFGV-FEHIRKN	----	42
leptosphaeria_maculans_15/1-17	1	M-----					1
glomerella_graminic_9/1-232	1	M-----	RLNLNL-----AAAGFCQAHTIFVSL	----	DADG-VNSGI-SQGV RTP	----	38
glarea_lozoyensis_6/1-240	1	M-----	KTQS-YLSFA-ALLPFASAHYTFSQL	----	QVGS-TTYPI-SYGIRTP	----	41
TYPE2:NCU02240/1-235	1	M-----	KVLSLL-----AAASAASAHYTFVQL	----	EADG-TTYPV-SYGIRTP	----	38
botryotinia_fuckeliana_2/1-234	1	M-----	AMAK-FIVTS-YPESRAVVKAILTKP	----		SDT-SYAIRTP	35
botryotinia_fuckeliana_12/1-24	1	M-----	KLQL-IIPFS-FLISYVSAHTIFMKL	----	QSGG-TLYNT-SYAIRTP	----	41
sclerotinia_sclerot_5/1-240	1	M-----	KLQF-LIPSS-FLISYVSAHTIFTQL	----	ESGG-TLYNT-SYAIRDP	----	41
Phaeosphaeria_nodorum_9/1-227	1	M-----	KLSTTL-----FFATAASAHYTFVSV	----	NGCK-V-----	GDGVRVP	34
chaetomium_thermophilum_18/1-2	1	M-----	KLLAPL-----ALVGAASAHYTFVSL	----	EVNG-VNHGV-GNGVRVP	----	38
cholletotrichum_higginsianum_3	1	M-----	KVLLSL-----LTASLASAHYTFSSL	----	EVGG-VNQGL-GNGVRVP	----	38
podospora_anseria_30/1-234	1	M-----	KFAPV-----LLASAASAHYTFSSL	----	EVNG-VNHGV-GGGVRVP	----	37
myceliophthora_thermophilia_10	1	M-----	KVLAPL-----LLAGAASAHYTFSSL	----	EVGG-VNHGV-GQGV RVP	----	38
neurospora_crassa_1/1-236	1	M-----	KVLAPL-----VLASAASAHYTFSSL	----	EVNG-VNQGL-GEGVRVP	----	38
TYPE2:NCU01050/1-226	1	M-----	KVLAPL-----VLASAASAHYTFSSL	----	EVNG-VNQGL-GEGVRVP	----	38
neurospora_tetrasperma_1/1-236	1	M-----	KVLAPL-----VLASAASAHYTFSSL	----	EVNG-VNQGL-GEGVRVP	----	38
sodaria_macrospora_11/1-236	1	M-----	KVLAPL-----VLASAASAHYTFSSL	----	EVGG-VNQGL-GQGV RVP	----	38
Paravalsa_indica_8/1-210	1	M-----	RLAIALVIGA-TYVTGVFGHATFQQL	----	WVNG-VDQGS--YCVRLP	----	41
pyrenophora_trici_repentis_11/	1	M-----	KYATIFL-----AAAATVSAHSTWQQL	----	WVGS-EDKAG--TCVRTV	----	38
leptosphaeria_maculans_11/1-22	1	M-----	KAGLILL-----TAAASVSAHSTWQDL	----	WVGS-EDKAT--SCTRTV	----	38
Phaeosphaeria_nodorum_14/1-22	1	M-----	KSGILVL-----LTVASVSAHSTWQQL	----	WVGS-DDKAG--TCVRTV	----	38
pyrenochaeta_lycope_1/1-227	1	M-----	KSAIVLL-----AAAASVSAHSTWQQL	----	WVGS-SDKAA--TCVRTV	----	38
pyrenophora_terestis_25/1-227	1	M-----	KYATIFL-----ATAATVSAHSTWQEL	----	WVGT-SDKAG--TCVRTV	----	38
glarea_lozoyensis_1/1-214	1	M-----	GNASQSL-----RKQVSSHNAQHP	----	SIPA-----		25
myceliophthora_thermophilum_12	1	M-----	KSTLTTLTAA-L-AGNAAAHATFQAL	----	WVDG-VDYGA--QCARLP	----	40
chaetomium_thermophilum_7/1-24	1	M-----	KTLSLALAA-LWAQKAAAHAMFQQL	----	WVDG-VDYGT--QCARVP	----	41
podospora_anseria_15/1-234	1	M-----	KSTFFAALTA-LAAKEIAAHATFQQL	----		WHGS--SCARLP	36
thievela_terestis_10/1-235	1	M-----	RTTFAAALAA-FAAQEVAGHAIFQQL	----		WHGS--SCVRMP	36
podospora_anseria_24/1-240	1	M-----	KSFTATALAA-LLAQAAAHS TFQQL	----	WVDG-TDFGS--QCARLP	----	41
pyrenophora_teres_17/1-233	1	M-----	KSTFILAGVT-AFATQVAHATFQDL	----		WS--TCARLP	34
pyrenophora_trici_repentis_8/	1	M-----	KNTFILVGLI-ALATQVVAHATFQDL	----		WS--TCARLP	34
chaetomium_globosum_22/1-239	1	M-----	KSFTVATLA-ALAGNAAAHATFQQL	----	WVDG-VDYGS--QCARVP	----	40
thievela_terestis_17/1-240	1	M-----	KSTIAALAA-LWAQEAHAHATFQDL	----	WIDG-VDYGS--QCVRLP	----	41
glomerella_graminic_32/1-232	1	M-----	KSIAALALTA-SMANMVAGHAIFQQL	----	WVNG-KDEAD--SCVRMP	----	41
verticillium_dahliae_23/1-243	1	M-----	KYA--ISAL-ALAALSQGHAI FQVV	----	SVNG-VEAPP-LSGLRAP	----	39
verticillium_albo_atrum_15/1-21	1	M-----	R-----NLGAIWEYGSSEVVG	----	SAPI-SEPGS-SERTPPF	----	33
glomerella_graminic_17/1-244	1	M-----	KLAF-LPAI-AFASMAHAHAI FQKV	----	SVNG-KPGS-LAGLRAP	----	40
chaetomium_globosum_23/1-244	1	M-----	KLSL-VSLL-GAALSVEGHAIFQKV	----	SVNG-ADQGS-LTGLRAP	----	40
podospora_anseria_29/1-244	1	M-----	KFSF-IALL-ACGLTVDHAHAI FQKI	----	SVNG-QDKGQ-LTGIRAP	----	40
chaetomium_thermophilum_15/1-2	1	M-----	KLSL-ASLL-TAALSQGHAI FQKV	----	SING-QDHGQ-LTGLRAP	----	40
sodaria_macrospora_16/1-245	1	M-----	KISL-LSLI-TYGLAVDAHAI FQKL	----	SVNG-KDNKG-LTGIRAP	----	40
myceliophthora_thermophilia_5/	1	M-----	KLSL-FSVL-ATALTVEGHAIFQKV	----	SVNG-ADQGS-LTGLRAP	----	40
thievela_terestis_2/1-244	1	M-----	KFSL-VSLL-AYGLSVEHSIFQKV	----	SVNG-QDQGL-LTGLRAP	----	40
Paravalsa_indica_13/1-241	1	M-----	KWAA-STLL-FAA-AANAHTIFQKV	----	FVNG-ADQGL-LVGLRAP	----	39
Paravalsa_indica_12/1-241	1	M-----	KWAA-STLL-FAA-AANAHTIFQKV	----	FVNG-ADQGL-LVGLRAP	----	39
myceliophthora_thermophilia_6/	1	M-----	KPF-SLV-ALATAVSGHAIFQRV	----	SVNG-QDQGL-LKGVRAP	----	38
chaetomium_globosum_31/1-241	1	M-----	KAF-SLV-TLATAVSGHAIFQRL	----	SVNG-QDQGL-LKGIRAP	----	38

podospora_anserina_4/1-241	1	M-----KAF---TLV-SLAASVSAHSIFQKV---SVNG-VDQGG-LKGVRA--	38
sodaria_macrospora_2/1-240	1	M-----KTG---AILT-ALVASASAHTIFQKV---SVNG-ADQGG-LKGIRAP--	39
neurospora_tetrasperma_16/1-24	1	M-----KTG---SILA-ALVASASAHTIFQKV---SVNG-ADQGG-LKGVRA--	39
neurospora_tetrasperma_14/1-24	1	M-----KTG---SILA-ALVASASAHTIFQKV---SVNG-ADQGG-LKGVRA--	39
TYPE2:NCU02916/1-241	1	M-----KTG---SILA-ALVASASAHTIFQKV---SVNG-ADQGG-LKGVRA--	39
4EIR/1-223	1	-----XTIFSSL-----EVNG-VNQG-LGEGVRVP--	23
pyrenophora_trici_repentis_22/	1	M-----KTQSVLLAAL-ASAPAAALHTVFTDF---FVDG-MPQG-----	34
verticillium_dahiae_24/1-222	1	M-----KTA---VVLG-LLAPFAFGNYLFRSI---TVNR-GRSAD-WEFVRET--	39
verticillium_albo_atrum_16/1-21	1	-----MLG-LLAPFAFGNYLFRSI---TVNR-GRSAD-WEFVRET--	34
verticillium_dahliae_26/1-221	1	M-----KSS---ALLP-LLSSGVLAHYFFNT---VNG-VQSAE-WEFIRET--	39
3ZUD/1-228	1	-----XGFVQNI---VIDG-KNYGG-YLVNQYPY--	24
TYPE3:NCU07898/1-239	1	M-----KT---FATLL-ASIGLVAAHGFVDNA---TIGG-QFYQF-YQPYQDPY--	40
2YET/1-228	1	-----XGFVQNI---VIDG-KNYGG-YLVNQYPY--	24
thermoascus_auranti_1/1-228	1	-----XGFVQNI---VIDG-KNYGG-YLVNQYPY--	24
4EIS/1-224	1	-----BHGFDNA---TIGG-QFYQF-YQPYQDPY--	25
giberella_zeae_7/1-251	1	MA-FQSINSSKA-SFWLTLL-LPALGISAHGHVDEI---IVNG-VSYQG-YGSTDFPY--	50
fusarium_oxysporum_3/1-252	1	MSLLSEMTCFKA-ACWLALL-LPAITVSAHGHVDEI---IING-VSYQG-YGSTDFPY--	51
nectaria_heimatococcuss_1/1-252	1	MTFFTAMSTLCA-SAWLYLL-FSAVSVSAHGHVTOV---IING-VQYAE-WEFIRET--	51
verticillium_albo_atrum_13/1-24	1	M-----AQKALFAVV-FGAVSAAHGFVETI---TVNG-KTYDN-YNPSTFPY--	42
verticillium_dahliae_4/1-241	1	M-----AQKALFAVV-LGAVSAAHGFVETI---TVNG-KTYDN-YNPSTFPY--	42
neurospora_tetrasperma_2/1-24	1	M-----ARKSILTAL-AGASLVAAHGHVSKV---IVNG-VEYQN-YDPTSFY--	42
TYPE3:NCU07760/1-240	1	M-----ARMSILTAL-AGASLVAAHGHVSKV---IVNG-VEYQN-YDPTSFY--	42
magna_porte_oryzae_16/1-243	1	M-----KS-AALLAAL-GSAGTVLAHGHVDYI---IVEG-VQYPG-YDVTKYPW--	42
podospora_anserina_31/1-244	1	-----MSNKA-ATLLAAL-GAALVAAHGHVSHI---IVNG-VYQYQ-YDPTTFPY--	44
hypocrea_orientalis_1/1-246	1	-----MIQKLSNLLLTAL-AVATGVVGHGHINNI---VNG-VYQYQ-YDPTSFY--	45
trichoderma_SP_SSL_1/1-246	1	-----MIQKLSNLLLTAL-AVATGVVGHGHINNI---VNG-VYQYQ-YDPTSFY--	45
Hypocrea_virens_3/1-246	1	-----MTQKLTSLLTAL-TVATGVVGHGHVNNI---VING-AYYQG-YDPTLFPY--	45
trichoderma_atroviride_2/1-246	1	-----MAQKLSNLFATL-TVATGVVGHGHVNNI---VNG-VYQYQ-YDPTSFY--	45
hypocrea_rufa_1/1-246	1	-----MIQKLSNLLLTAL-AVATGVVGHGHINNI---VING-VWYQA-YDPTTFPY--	45
hypocrea_rufa_2/1-246	1	-----MIQKLSNLLLTAL-AVATGVVGHGHINNI---VING-VWYQA-YDPTTFPY--	45
trichoderma_saturnisporum_1/1-	1	-----MIQKLSNLLAAL-TVATGVVGHGHINNI---VING-VYQYQ-YDPTSFY--	45
aspergillus_kawachii_37/1-247	1	-----MRQAQSASLLAAL-LSATQVAAHGHVTNI---VVDG-VYEG-FDISVFPY--	45
aspergillus_tereus_6/1-245	1	-----MDRLSKSTLLALL---ASQVAGHGHVTNI---VING-VSYQG-WDINSFPY--	43
neosartorya_fischeri_4/1-247	1	-----MRHVQSTQLAAL-LTTRVTAHGHVTNI---VNG-VSYRG-WNIDSDPY--	45
aspergillus_fumingatus_4/1-247	1	-----MRHVQSTQLAAL-LTTRVTAHGHVTNI---VING-VSYRG-WNIDSDPY--	45
aspergillus_tereus_10/1-245	1	-----MHTLQSAILLGGL--LATQVAAHGHVTNI---VING-VYRG-WNIDSDPY--	44
chaetomium_globosum_5/1-220	1	-----MPSYTSKTLTLLSAL-AGAVSVAHGHVTNI---VING-VSYEG-FDPTSFY--	45
TYPE3:NCU05969/1-243	1	-----MPSFTSKSLLAVAL-AGAASVAAHGHVSN---VING-EYRG-FDSSLNY--	44
2VTC/1-228	1	-----HGQVQNF-----TING-QYNG-FIL-DYYQ--	24
aspergillus_fumingatus_1/1-245	1	M-----SVPKIAAALL-SSAALVAGHGFVTGA---VVDG-KYYTG-YLVNQYPY--	43
neosartorya_fischeri_1/1-245	1	M-----SVSKIAAVLL-SSAALVAGHGFVSGA---VVDG-KYYTG-YLVNQYPY--	43
aspergillus_niger_1/1-245	1	M-----PLSKIAGVLL-ASASLVAGHGVSSI---EVDG-TTYGG-YLVDTYYY--	43
aspergillus_kawachii_40/1-245	1	M-----SLSKIAGVLL-ASASLVAGHGVSSI---EVDG-TTYGG-YLVDTYYY--	43
aspergillus_tereus_5/1-232	1	M-----SLSKIATGIL-ASATLVAGHGVSGI---VADG-KYYSG-YLVDKYSY--	43
emmericella nidulans_9/1-245	1	M-----SVARTAGFAL-ASAAIVAGHGVVTGI---VADG-TTYGG-YLVNQYPY--	43
penicillium_chrysogenum_2/1-245	1	M-----SVSKIAGVLL-SSAAMVAGHGFVSGA---VVDG-TYHGG-YLVNNYPY--	43
aspergillus_niger_2/1-245	1	M-----SVAKIAGVVL-GSAALVAGHGVVSGA---VIDG-EYYGG-YIVSSYAY--	43
aspergillus_niger_12/1-244	1	M-----SVAKIAGVVL-GSAALVAGHGVVSGA---VIDG-EYYGG-YIVSSYAY--	43
aspergillus_kawachii_38/1-245	1	M-----SVAKIAGVVL-GSAALVAGHGVVSGA---VVDG-QYYGG-YIVSSYAY--	43
zea_mays_1/1-245	1	M-----SVAKIAGVVL-GSAALVAGHGVVSGA---VVDG-QYYGG-YIVTSYAY--	43
aspergillus_clavatus_6/1-241	1	M-----SVTKIAGVLL-GSAAMVAGHGFVTGA---VVDG-TYHTG-YLVNNYPY--	43
aspergillus_tereus_8/1-241	1	M-----SVAKIAGVVL-GSAALVAGHGVVTGA---VVDG-KYYAG-YDVTSAFY--	43
aspergillus_oryzae_7/1-242	1	M-----SIAKIAGVVL-GSAALVAGHGVVSGA---VVDG-QYYSG-YDM-SYHY--	42
aspergillus_favus_5/1-242	1	M-----SIAKIAGIVL-GSAALVAAHGHVSGA---VVDG-QYYPG-YDI-SYHY--	42
glomerella_graminic_4/1-242	1	-----MSSFKNISIVLSAL-AGAVSVAHGHVVSF---TDGS-QFSG-YDVTKMAY--	45
aspergillus_fumingatus_3/1-238	1	M-----KLS---LLASV-ALVPFVSAHYFFDVL---VIDG-KETRS-NEFVRSNT--	41
cholletotrichum_higginsianum_2	1	M-----KFS---AVVLA-AIAPLVSAHYFFDTL---IVDG-KATKS-FEYVRSNT--	41
glomerella_graminic_7/1-238	1	M-----KFS---AVALS-AVAPLASAHYFFDSF---IVDG-VATKS-FEYVRDNT--	41
aspergillus_clavatus_5/1-238	1	M-----KLS---VITAV-ALVPFVSAHYFFDKL---IVNG-KETAS-FQYVRSNT--	41
aspergillus_oryzae_5/1-238	1	M-----KLS---FLALA-AIAPFVSAHYFFDTL---IVDG-KESSP-NQYVRSNT--	41
aspergillus_favus_3/1-238	1	M-----KLS---FLALA-AIAPFVSAHYFFDTL---IVDG-KESSP-NQYVRSNT--	41
aspergillus_niger_9/1-238	1	M-----KLT---LLTTA-LIAPLVSAHYFFDTL---VIDG-QETTP-NQYVRSNT--	41
emmericella nidulans_6/1-238	1	M-----KLS---LLAAA-AIAPMVSAHYFFDTL---VIDG-QETTP-NQYVRSNT--	41
aspergillus_clavatus_1/1-238	1	M-----KLS---LLALS-AIAPLVSAHYFFDVL---VIDG-KETKS-NEFVRSNT--	41
neosartorya_fischeri_7/1-238	1	M-----KLS---LLAAV-ALVPFVSAHYFFDVL---VIDG-QETKS-NEFVRSNT--	41
penicillium_chrysogenum_4/1-236	1	M-----KFS---LVALA-AIAPMVSAHYFFDTI---VIDG-KEAS---DSVRSNT--	39
verticillium_albo_atrum_17/1-21	1	M-----RFS---ILAVA-ALTPLASAHYFFDKL---IDG-VETRS-NEFVRSNT--	41
verticillium_albo_atrum_17/1-2	1	M-----NFC---ILAAA-ALTPLASAHYFFDKL---IIDD-VETRS-NEFVRSNT--	41
pyrenophora_teres_22/1-230	1	M-----KAV---ALFSL-LAPMVADAHYIFSSL---IVNG-AQGGDFAYARKNS--	42
Phaeosphaeria_nodorum_4/1-230	1	-----MVKAT---AVLAL-LAPL-TQAHYIFNQL---LVDN-KAIGGDYAYTRKNT--	42
pyrenophora_trici_repentis_23/	1	M-----KAV---ALFAL-VAPMVADAHYIFNLL---TV-----	26
podospora_anserina_17/1-231	1	M-----KLS---SFTILA-GLAAQAQAHYIFNIL---IVNG-QRIGGEYTYVRRNS--	43
glomerella_graminic_16/1-230	1	M-----RISTFLPLVA---VPFVQCHYIFSOL---IVNG-NAVGSDFYTMRKNS--	42
glomerella_graminic_31/1-230	1	M-----KGLLSFGLLA---APLVQGHYIFSOL---FVDD-KAAGGDYTYIRKNT--	42
chaetomium_globosum_15/1-229	1	M-----K---SFFVAA-ALAAAEAHYIFNIL---MVND-QRMGGEYTYVRRNS--	41
neosartorya_fischeri_2/1-235	1	M-----KLTSSILFSLASVTPLVSGHYVFSKL---IVDG-KPTQD-FEYIRKNT--	44
aspergillus_tereus_12/1-235	1	M-----KSFSPSLLLLASVAPLVSGHYVFSKF---LVDG-SVSQD-FEYIRKNS--	44

aspergillus_favus_7/1-235 1 M-----KLNLSLSFLASIAIPLVSGHYVFSKL---IVDG-QTTKD-FEYIRENS- 44
 aspergillus_fumingatus_6/1-235 1 M-----KLTASILFSLASVTPLVSGHYVFSKL---IVDG-KPTQD-FEYIRNT- 44
 4B5Q/1-217 1 -----HYTFPDF-----IEPSGTVTGD-WVYVRET-- 24
 3EJA/1-208 1 -----HYTWPRV-----NDGA-DW-----QQVRKA-- 19
 3EII/1-208 1 -----HYTWPRV-----NDGA-DW-----QQVRKA-- 19

		70	80	90	100	110	120
serpula_lacrymans_5/1-229	40		QNTNDNS	PVTDVTSTDIRCNV	GGGLA-SGATTSTYTVS	AGSVVG	82
schizzophylum_communis_15/1-228	39	-----	RTNNYYSQQPVTDVTS	PDFTCYTTETQ	-----	ATAETA	EAACSSVS 81
schizzophylum_communis_16/1-228	39	-----	ATATTAEVAAGSSVS	SIKANGP	-----	MYHAGV	VNVNVM 71
chaetomium_globosum_8/1-223	36	-----	DNWQNNNG	FVGDVNSAQIRCF	QSSSA	GAQDVYT	VSAGSTVK 76
pyrenophora_trici_repentis_13/	36	-----	KNWQDNG	FVGDVTSSDIRCN	QLRP	GTSGALS	VAAAGSSVK 75
pyrenophora_trici_repentis_11/1-209	36	-----	KNWQDNG	FVGDVTSSDIRCN	QLRS	GTSGALS	VAAAGSSVK 75
Phaeosphaeria_nodorum_18/1-21	35	-----	KNWQDNG	FVGDVTSSAIRCN	QLSP	GKS-TLS	VAAAGSSVK 73
podospora_anseria_18/1-223	36	-----	DNWQNNNG	FVGSVTSPQIRCF	QNSVA	GASQTYN	VSAGSOLT 76
thievela_terestis_18/1-224	37	-----	DNWQDNG	YVGDVTSPQIRCF	QATPS	PAPSVLNT	TAASTVTT 77
myceliophthora_thermophilia_21	36	-----	DNWQNNNG	FVGDVNSEQIRCF	QATPA	GQPDVYT	VAAGSTVK 76
TYPE1:NCU03328/1-229	40	-----	DNWQNNNG	FVDNVNSQQIRCF	QSTHS	PAQSTLS	VAAAGTTIT 80
emmericella_nidulans_3/1-229	41	-----	TGSYGNG	PVEDVTSIDIRCN	KDAST	NGNATET	TLVPKAGEEIG 83
aspergillus_tereus_4/1-228	41	-----	TGSYTNS	PVTDVDSLDIRCN	VDATT	GNNTSTL	GVAAAGSTIG 82
podospora_anseria_11/1-231	40	-----	QNHYSNG	PVTDVNSPLMTCY	ERDPG	VGAPNTL	AVAGSTVTT 81
glomerella_graminis_6/1-230	40	-----	LNIFYSNG	PTDGVSSQIRCY	EADAKD	RGTVQTL	PLVTAAGSTIG 82
arthrobotrys_oligospora_11/1-1	2	-----	TNKYSNG	PVTDVTSSDMRCY	K-DPA	APIASTAN	VAAAGSOVG 42
pyrenophora_trici_repentis_20/	40	-----	SNYQSHG	PVTDVTSNAIRCY	ELSPG	TGSKTYT	VNAAGTVG 80
Phaeosphaeria_nodorum_28/1-22	40	-----	TNSNG	PVTDVTSNQIRCY	ELSPG	TGSKTYT	VNAAGTVG 78
myceliophthora_thermophilia_16	40	-----	ENHYSHG	PVTDVTSPEMTCY	QSGV	QGAPQTV	QKAGSOFT 80
thievela_terestis_11/1-231	40	-----	TNHYSHG	PVTDVTSQIRCY	ELNPG	TPAPQIAT	VQAGSTVTT 81
chaetomium_globosum_24/1-226	40	-----	ENHYSHG	PVEDVSSSRMTCY	QDVG	TGAAKTV	SVKAGSTVIG 81
chaetomium_thermophilum_14/1-23	40	-----	ANHWSHG	PVTDVTSQEMTCY	EKNPG	TPAPKTI	TVQAGSTVTT 81
TYPE1:NCU02344/1-232	40	-----	ENHYNRG	PVADVTSEMTCY	ELNPG	KGAPKTL	SVAAAGSNYT 81
myceliophthora_thermophilia_2/	42	-----	TNYNS	PVTDLTSDNIRCN	VGATG	AGTDTVT	VTRAGDSFT 80
sodaria_macrospora_4/1-217	40	-----	TNYNS	PVTDLTSDNIRCN	VGASA	SGVETLS	VAAAGSTVTT 78
neurospora_tetrasperma_12/1-21	41	-----	TNYNS	PVTDLTSKDIVCN	VGASA	EGVETLS	VAAAGSTVTT 79
TYPE1:NCU00836/1-218	41	-----	TNYNS	PVTDLTSKDIVCN	VGASA	EGVETLS	VAAAGSTVTT 79
thievela_terestis_7/1-223	42	-----	TNYNS	PVTDLTSDNIRCN	VGAQG	AGTDTVT	VTRAGDSFT 80
podospora_anseria_5/1-221	42	-----	NNHNS	PVTSLSDDNIRCN	VGGAS	GASTSVV	NKAGDSVTT 81
leptosphaeria_maculans_15/1-17	1	-----	-----	-----	-----	MPLPKD	ILNVKAGDSLT 17
glomerella_graminis_9/1-232	38	-----	DYDYG	PQTDVTSQYIACN	GPPNPTK	PTDKVIT	VTRAGSTVTT 77
glarea_lozoyensis_6/1-240	41	-----	NYDYG	PINDVSSKDVVCN	GPPNPTT	PSSKIID	VKAGDSVTK 80
TYPE2:NCU02240/1-235	38	-----	SYDYG	PITDVTSDNIRCN	GPPNPTT	PSSKIID	VKAGDSVTK 77
botryotinia_fuckeliana_2/1-234	35	-----	TYDYG	PINDVTTEYVACN	GPPNPTT	PSSNIIN	VVAGSTVTK 74
botryotinia_fuckeliana_12/1-24	41	-----	TYDYG	PINDVTTEYVACN	GPPNPTT	PSSNIIN	VVAGSTVTK 80
sclerotinia_sclerot_5/1-240	41	-----	TYDYG	PITDVTQYVACN	GPPNPTT	PSSNIIN	VVAGSTVTK 80
Phaeosphaeria_nodorum_9/1-227	34	-----	SYDYG	PINDVSSNDIVCN	GPPNPTA	STSTVIT	VTRAGSSAT 73
chaetomium_thermophilum_18/1-2	38	-----	SYNG	PIEDVTSNSIACN	GPPNPTT	PTDKVIT	VTRAGSEVT 77
cholletotrichum_higginsianum_3	38	-----	SYNG	PIEDVTSNSIACN	GPPNPTS	STSGVCE	VAAAGSTVTT 77
podospora_anseria_30/1-234	37	-----	SYNG	PIENVDSASIA	CNAPNPTT	PTSKVIT	VTRAGQVNT 76
myceliophthora_thermophilia_10	38	-----	SYNG	PIEDVTSNSIACN	GPPNPTT	PTNKVIT	VTRAGSTVTT 77
neurospora_crassa_1/1-236	38	-----	TYNG	PIEDVTSASIA	CNOSPNTVA	STSKVIT	VTRAGSTVTT 77
TYPE2:NCU01050/1-226	38	-----	TYNG	PIEDVTSASIA	CNOSPNTVA	STSKVIT	VTRAGSTVTT 77
neurospora_tetrasperma_1/1-236	38	-----	TYNG	PIEDVTSASIA	CNOSPNTVA	STSKVIT	VTRAGSTVTT 77
sodaria_macrospora_11/1-236	38	-----	TYNG	PIEDVTSASIA	CNOSPNTVG	STSKVIT	VTRAGSTVTT 77
Paravalsa_indica_8/1-210	41	-----	QNNN	PVTSVTSNDIACN	NAGAA	SSSGLC	SVKPKDRVT 77
pyrenophora_trici_repentis_11/	38	-----	KDNS	PITSITSDMFCGR	GPA	STSGVCE	VAAAGSSLT 74
leptosphaeria_maculans_11/1-22	38	-----	ANNN	PISLTSADMFCC	GIGPA	KSSGVCE	VAAAGSALT 74
Phaeosphaeria_nodorum_14/1-22	38	-----	KDNS	PIASLTSTDMFC	GRGPA	TSSGVCE	VAAAGSALT 74
pyrenochaeta_lycope_1/1-227	38	-----	KDNS	PIESLTSADMFCC	GRGPA	ASSGVCE	VAAAGSALT 74
pyrenophora_terestis_25/1-227	38	-----	KDNS	PITSLTSPDMFC	GRGPA	STSGVCE	VAAAGDSLT 74
glarea_lozoyensis_1/1-214	25	-----	A	PVTSVSSNDIRCN	NAGTK	PVTPLCT	VTPAGSTIT 58
myceliophthora_thermophilum_12	40	-----	ASNS	PVTDVTSNAIRCN	NANPS	PARGKCP	VKAGSTVTT 76
chaetomium_thermophilum_7/1-24	41	-----	GSNS	PVTNVNSPEIRCN	NAYPS	PAKGKCP	VKAGSTVTT 77
podospora_anseria_15/1-234	36	-----	PSNS	PVTNVGGRDIVCN	NAGTR	GVAGKCP	VKAGSTVTT 72
thievela_terestis_10/1-235	36	-----	LSNS	PVTNVGSRDMICN	NAGTR	PVSGKCP	VKAGSTVTT 72
podospora_anseria_24/1-240	41	-----	QSNS	PITNYSNNDMRCN	IIIGT	RPQVKCP	VTRAGSTVTT 77
pyrenophora_teres_17/1-233	34	-----	NSNS	PVQSVTSNDIRCN	NANQG	PAASKCS	VPAAGSTVTT 70
pyrenophora_trici_repentis_8/	34	-----	NSNS	PVQSVTSNDIRCN	NANQG	PAASKCS	VPAAGSTVTT 70
chaetomium_globosum_22/1-239	40	-----	SSNS	PITDVSGTGVRCN	VGTS	RPSGKCP	VKAGSTVTT 76
thievela_terestis_17/1-240	41	-----	ASNS	PVTNVASDDIRCN	VGTS	RPVVKCP	VKAGSTVTT 77
glomerella_graminis_32/1-232	41	-----	ASNS	PIQDPTSDDMRCN	NANAA	KAASTCA	VKAGDSVTT 77
verticillium_dahliae_23/1-243	39	-----	GINN	PVEDVSSNDITCGL	VTH	TSTDVIE	VEAGDEIG 75
verticillium_albo_atrum_15/1-21	33	-----	RRKA	PVQKAPNH	-----	FEA	DEIG 53
glomerella_graminis_17/1-244	40	-----	NQNN	PTQDVTSQDIICG	KVAT	SSQEVIS	VAPEDRIG 76
chaetomium_globosum_23/1-244	40	-----	NNNN	PVQDVSSQNMICG	QPGS	TSQTVIO	VKAGDRIG 76
podospora_anseria_29/1-244	40	-----	NNNN	PVQNVNDQNMACG	QPGS	KSNTVVN	VNAGDRIG 76
chaetomium_thermophilum_15/1-2	40	-----	NTNY	PVEDVNSQDIICG	QSGH	RSSTILN	VRAEDRIG 76
sodaria_macrospora_16/1-245	40	-----	GNNN	PVQDVSSSNMACG	ASGT	KSQTVIN	VAPEDRIG 76

myceliophthora_thermophilia_5/ 40 -----NNNN--PVQNVNSQDMICGQSGS---TSNTIIEVKACDRIG 76
thievela_terestis 2/1-244 40 -----SNNN--PVQDVNSQNMICGQSGS---KSQTVINVKACDRIG 76
Paravalsa_indica_13/1-241 39 -----SNNN--PIQSTSDSGIACGASGS---KSSTVINVKACDTIG 75
Paravalsa_indica_12/1-241 39 -----SNNN--PIQSTSDSGIACGASGS---KSSTVINVKACDTIG 75
myceliophthora_thermophilia_6/ 38 -----SSNS--PIQNVNDAMACNANIV---YHDNTIIEKVPACARVG 75
chaetomium_globosum 31/1-241 38 -----YSNY--PIQNVNDANIACNANIQ---IKDNTIIEKVPACARVG 75
podospora_anseria_4/1-241 38 -----YSNF--PIENVNHPDFACNTNIQ---LRDNTVIKVPACARVG 75
sodaria_macrospora_2/1-240 39 -----PNNN--PVLNVQSGDIACNVAS---IKDSNVLTVPACARVG 75
neurospora_tetrasperma_16/1-24 39 -----ANNN--PVTDMSSDIICNAV---MKDSNVLTVPACARVG 75
neurospora_tetrasperma_14/1-24 39 -----ANNN--PVTDMSSDIICNAV---MKDSNVLTVPACARVG 75
TYPE2:NCU02916/1-241 39 -----ANNN--PVTDMSSDIICNAV---MKDSNVLTVPACARVG 75
4EIR/1-223 23 -----TYNG--PIEDVTSASIIACNGSPNTVA---STSKVITVQAGTNVT 62
pyrenophora_trici_repentis_22/ 34 -----DGVAMHVGGTK---GVSRVQSPVDCALT 60
verticillium_dahliae_24/1-222 39 -----ANNPVS---PIEDVSSPILGCEYKVR---PVSDDVITVPACGRTR 79
verticillium_albo_atrum_16/1-21 34 -----ANNPASN--PIEDVSSPILGCEYKIGR---PVSADVQTVAPGRTR 74
verticillium_dahliae_26/1-221 39 -----NNNPGE--PVEDLSSTHRCFEKPGR---PPSAVLPTVAGTVG 79
3ZUD/1-228 24 ---MSNPPEVIAWSTT-ATDLGFVDGTGYQTPDIICHRGAK---PGALTAPVSPGTVG 76
TYPE3:NCU07898/1-239 40 ---MGSPPDRISSRK----IPGNGPVEDVTSALIQCNADSA---PAKLHASAAGSTVT 88
2YET/1-228 24 ---MSNPPEVIAWSTT-ATDLGFVDGTGYQTPDIICHRGAK---PGALTAPVSPGTVG 76
thermoascus_auranti_1/1-228 24 ---MSNPPEVIAWSTT-ATDLGFVDGTGYQTPDIICHRGAK---PGALTAPVSPGTVG 76
4EIS/1-224 25 ---MGSPPDRISSRK----IPGNGPVEDVTSALIQCNADSA---PAKLHASAAGSTVT 73
giberella_zeae_7/1-251 50 ---MQDPPEVVGWSTIE-QADNGFVSPDKYDDPDIIICHRDAT---PAKGHIEVTAEDVIT 102
fusarium_oxysporum_3/1-252 51 ---MENPPVVGWSTIS-QRDNGFVSPDAYGDPDIICHRDAT---PAEGHIEVTAEDVIT 103
nectria_heamatococcuss_1/1-252 51 ---QRKPPVVLGWSTIE-QRDNGFVSPDKYDHPDIICHRDAT---PAQGHVQVAAEDVIT 103
verticillium_albo_atrum_13/1-24 42 ---NPSPPVPGWSTAD-FPDGLGFVEPAATGDPDIICHSAT---NGGSHIPAAEDVIT 94
verticillium_dahliae_4/1-241 42 ---NPSPPVPGWSTAD-FPDGLGFVEPAATGDPDIICHSAT---NGGSHIPAAEDVIT 94
neurospora_tetrasperma_2/1-24 42 ---NSNPPTVIGWTID-QKDNGFVSPDAFDSGDIICHSAT---PAGGHATVKAEDKIS 94
TYPE3:NCU07760/1-240 42 ---NSNPPTVIGWTID-QKDNGFVSPDAFDSGDIICHSAT---PAGGHATVKAEDKIS 94
magna_porte_oryzae_16/1-243 42 ---QSQQPTVVGWSTAT-NTDNGFVEPNNGFSGPDIICHRGAQ---PAKGHARVKAEDRIL 94
podospora_anseria_31/1-244 44 ---QDPPEVVGWSTAD-QDNGFVSPDAYQSPDIICHSAT---PGGGSATVKAEDKIS 96
hypocrea_orientalis_1/1-246 45 ---ESDPPVVGWSTAA-DLDNGFVSPDAYQSPDIICHSAT---NAKGHASVKAEDTIL 97
trichoderma_SP_SSL_1/1-246 45 ---ESDPPVVGWSTAA-DLDNGFVSPDAYQSPDIICHSAT---NAKGHASVKAEDTIP 97
Hypocrea_virens_3/1-246 45 ---EPNPPVVGWSTAS-DTDNGFVSPDAYQSPDIICHRNAT---NARGHASVMAESSVL 97
trichoderma_atrovirens_2/1-246 45 ---MPDPPVVGWSTAA-DTDNGFVSPDAYQTPDIVCHKNGT---NAKGHASVKAEDSVL 97
hypocrea_rufa_1/1-246 45 ---ESNPPVVGWSTAA-DLDNGFVSPDAYQNPDIICHSAT---NAKGHASVKARDTIL 97
hypocrea_rufa_2/1-246 45 ---ESNPPVVGWSTAA-DLDNGFVSPDAYQNPDIICHSAT---NAKGHASVKARDTIL 97
trichoderma_saturnisporum_1/1- 45 ---ESNPPVVGWSTAA-DLDNGFVSPDAYGSPDIICHSAT---NAKGHASVRACDVL 97
aspergillus_kawachii_37/1-247 45 ---ESDPPVIAWSTTP-NTGNGFISPDAYRDPNIICHENAT---NAQGHVVGAGCKIN 97
aspergillus_tereus_6/1-245 43 ---MADPPVVGWSTP-NTGNGFIAPDAFTSDDMICHLNAT---NAKGFAVTAACDSTIN 95
neosartorya_fischeri_4/1-247 45 ---NPNPPVVGWQTP-NTANGFISPDAYGTNDIICHLNAT---NARGHAVVAAEDKIS 97
aspergillus_fumingatus_4/1-247 45 ---NPDPPVVGWQTP-NTANGFISPDAYGTNDIICHLNAT---NARGHAVVAAEDKIS 97
aspergillus_tereus_10/1-245 44 ---NSNPPTVAAWRTTP-NTANGFIAPDAFTSDIICHLNAL---NQGGHIOVAAEDRIS 96
chaetomium_globosum_5/1-220 45 ---NPNPPVVGWTEG-NSDNGFVSPDAFNGNDIICHSAT---NAGGHAVVAAEDSVF 97
TYPE3:NCU05969/1-243 44 ---MANPPAVVGWKAN-NQDNGFVGPDAFSSPDIICHKDAT---NAKGHAVVKAEDKIS 96
2VTC/1-228 25 KQNTGHPFNAGWYAE-DLDLGFISPDQYTTTPDIVCHKNA---PGAISATAAGSNIV 79
aspergillus_fumingatus_1/1-245 43 ---MSSPPDISGWSET-ATDLGFVDGSGYSSGDIICHKDAK---NGAISAEIKACGRVE 95
neosartorya_fischeri_1/1-245 43 ---MSSPPDISGWSET-ATDLGFVDGSGYSSGDIICHSAT---NGAISAEIAACGRVE 95
aspergillus_niger_1/1-245 43 ---ESDPPETIAWSTN-ATDDGVSPQYDSSNIVCHRGSA---PGALAAPVTPGGTVK 95
aspergillus_kawachii_40/1-245 43 ---ESDPPETIAWSTN-ATDDGVSPQYESSNIVCHRGSA---PGALAAPVTPGGTVK 95
aspergillus_tereus_5/1-232 43 ---MNDPPETIGWSTT-ATDLGFVDGTGYDTPDIICHKGSA---PGALTATVPAACGRIE 95
emmericella nidulans_9/1-245 43 ---SDNPPAVVGWAEAD-ATDLGFVDGSGYTSGDIICHKDAT---NQAASATVPAACGRIE 95
penicillium_chrysogenum_2/1-245 43 ---NDNHPETIGWAEK-ATDLGFVDGSGYSGPDIICKEAT---PGAISAEVKAEDGVE 95
aspergillus_niger_2/1-245 43 ---ESDPPETIAWSTT-ATDLGFVDGSEYSDPDIICHSAT---PGAISADVKAEDGVE 95
aspergillus_niger_12/1-244 43 ---ESDPPETIAWSTT-ATDLGFVDGSEYSDPDIICHSAT---PGAISADVKAEDGVE 95
aspergillus_kawachii_38/1-245 43 ---ESDPPETIAWSTE-ATDLGFVDGSEYAEADIIICHSAT---PGAISADVKAEDGVE 95
zea_mys_1/1-245 43 ---SSNPPKTIWSET-ATDLGFVDGTGYASGDIICHKNAK---PGALSADIKACGRVE 95
aspergillus_clavatus_6/1-241 43 ---SSDPPATIGWSTT-ATDLGFVDGTEYSEPDIIICHKDAK---PGSLSAETIACGRVE 95
aspergillus_oryzae_7/1-242 42 ---MSSPPQVIGWSTD-ATDLGFVDGSSYADADIICHKNAK---NGAISAEIAACKOVE 94
aspergillus_favus_5/1-242 42 ---MPDPPKVIGWSTD-ATDNGFVDGSSYADADIICHKNAK---NGAISAEIAACKOVE 94
glomerella_graminic_4/1-242 45 ---MNPAPVVGWSET-ATDNGFVAPSAITDADIICHRGAK---NAALTAKVAAEDKIT 97
aspergillus_fumingatus_3/1-238 41 ---RPAKYNPTK----WKNIR--DDMTDPMPDFRCKGAF-TFAGQTGTAEVKAESKLA 90
cholletotrichum_higginsianum_2 41 ---RPAKYNPTK----WENVR--DGMTDLPDFRCKGAF-TFAAKTGTLEVKAGSKVA 90
glomerella_graminic_7/1-238 41 ---RPAKYNPTK----WENVR--DDMTDPVDFRCKGAF-TFAGKTRTMEVKAGSKVG 90
aspergillus_clavatus_5/1-238 41 ---RPNKYNPTK----WNNVR--DDMTDPMSDFRCKGAF-TFAGKTGTAEVKAGSKVA 90
aspergillus_oryzae_5/1-238 41 ---RPAKYNPTK----WVNTR--DDMTDPMPDFRCKGSF-TFAGQTGTAEVKAESKLA 90
aspergillus_favus_3/1-238 41 ---RPAKYNPTK----WVNTR--DDMTDPMPDFRCKGSF-TFAGQTGTAEVKAESKLA 90
aspergillus_niger_9/1-238 41 ---RPAKYNPTK----WKNTR--DDMTDPMPDFRCKGSF-TFAGQTGTAEVKAESKLA 90
emmericella nidulans_6/1-238 41 ---RPEKYNPTK----WVNTR--DDMTDPMPDFRCKGSF-TFAGQTGTAEVKAESKLA 90
aspergillus_clavatus_1/1-238 41 ---RPAKYNPTK----WVNIR--DDMTDPVDFRCKGAF-TFAGKTGTAEVKAESKLA 90
neosartorya_fischeri_7/1-238 41 ---RPAKYNPTK----WKNIR--DDMTDPMPDFRCKGAF-TFAGKTGTAEVKAESKLA 90
penicillium_chrysogenum_4/1-236 39 ---RPAKYNPTK----WVNTR--DDMTDPMPDFRCKGAF-TFAGQTGTAEVKAESKVA 88
verticillium_albo_atrum_17/1-21 41 ---RPAKYNPTK----WENVR--DDMTDPVDFRCKGAF-TFAGQTGTAEVKAESKLA 90
verticillium_albo_atrum_17/1-2 41 ---RPAKYNPTK----WENIR--DDMTDPVDFRCKGAF-TFASQTGTAEVKAESKLA 90
pyrenophora_teres_22/1-230 42 ---NTYM-----PSF--TSEIVNSPEIRCNKGAKP---GSTGTQTVKACDRIG 82
Phaeosphaeria_nodorum_4/1-230 42 ---NTYM-----PSF--TSEIVNSPEIRCNKGAKP---GSTGTQTVKACDRIG 82
pyrenophora_trici_repentis_23/ 26 ---NNYM-----PSF--TSEIVNSPEIRCNKGAKP---GSTGTQTVKACDRIG 66

[illegible]

verticillium_albo_atrum 15/1-21	54	AWYQHILGGEQYFGDNDN-PIAASHKGPITANTAKVDDAAT---- <td>108</td>	108
glomerella_graminic 17/1-244	77	AWWQHVIIGAQFPGDPDN-PIASSHKGPITANTAKVPSASG---- <td>131</td>	131
chaetomium_globosum 23/1-244	77	AWYQHVIIGAQFPNDPDN-PIASSHKGPVMAITAKVDNAAS---- <td>131</td>	131
podospora_anseria 29/1-244	77	AYFGHVIIGAQFPNDRDH-PIAASHKGPVQANTAKVDNAAT---- <td>131</td>	131
chaetomium_thermophilum 15/1-2	77	TFWGHVIGGAQFPGDPDN-PIARSHKGPVQVITAKVDNAAS---- <td>131</td>	131
sodaria_macrospora 16/1-245	77	AFWGHVIGGPQFPNDQDN-PIAKSHKGPVIAITAKVDNAAS---- <td>132</td>	132
myceliophthora_thermophilia 5/	77	AWYQHVIIGAQFPNDPDN-PIAKSHKGPVMAITAKVDNAAT---- <td>131</td>	131
thievela_terestis 2/1-244	77	SLWQHVIIGAQFSGDPDN-PIAASHKGPVMAITAKVDNAAS---- <td>131</td>	131
Paravalsa_indica 13/1-241	76	TYWQHVIIGGPQGSNDPDN-PIAKSHKGPVQVITAKVDNAAS---- <td>130</td>	130
Paravalsa_indica 12/1-241	76	TYWQHVIIGGPQGSNDPDN-PIAKSHKGPVQVITAKVDNAAS---- <td>130</td>	130
myceliophthora_thermophilia 6/	76	AWWQHVIIGGPQGANPDN-PIAASHKGPVQVITAKVDNAAT---- <td>130</td>	130
chaetomium_globosum 31/1-241	76	AWWQHVIIGGPQGANPDN-PIAASHKGPVQVITAKVDNAAT---- <td>130</td>	130
podospora_anseria 4/1-241	76	AWWGHVIIGAAGPNDPDH-PIAASHKGPVQVITAKVDNAAT---- <td>130</td>	130
sodaria_macrospora 2/1-240	76	HWGHEFGGASGPNDDLN-PIAASHKGPVIVITAKVDNAAT---- <td>130</td>	130
neurospora_tetrasperma 16/1-24	76	HWGHEFGGASGPNADN-PIAASHKGPVIVITAKVDNAAT---- <td>130</td>	130
neurospora_tetrasperma 14/1-24	76	HWGHEFGGASGPNADN-PIAASHKGPVIVITAKVDNAAT---- <td>130</td>	130
TYPE2:NCU02916/1-241	76	HFVGHEFGGASGPNADN-PIAASHKGPVIMVITAKVDNAAT---- <td>130</td>	130
4EIR/1-223	63	AIWRYMLSTTG----DSPADVMDSSHKGPITANTAKVDNAAT---- <td>115</td>	115
pyrenophora_trici_repentis 22/	61	FEIRSWPNP-----SKE-RLDRGHKGPICAVITAKVDNAAT---- <td>110</td>	110
verticillium_dahliae 24/1-222	80	FPSSAP-----IGHPGVLFVITARVPDGQDV-ISTWPTGNVWFKVQDYG	122
verticillium_albo_atrum 16/1-21	75	FPSSVP-----IGHPGVLFVITARVPDGQDV-NSWTPGVDVWFKVQDYG	117
verticillium_dahliae 26/1-221	80	FTSSNS-----MGHPGVLFVITARVPDGEDV-TVDVGVGDVWFKIQDQD	122
3ZUD/1-228	77	LQWTPW-----PDSHHPVITITAPCNGDCS----TVDKTQLEFFKIDGAG	118
TYPE3:NCU07898/1-239	89	LRWTIW-----PDSHHPVITITAPCNGDCS----TVDKTQLEFFKIDGAG	118
2YET/1-228	77	LQWTPW-----PDSHHPVITITAPCNGDCS----TVDKTQLEFFKIDGAG	118
thermoascus_auranti 1/1-228	77	LQWTPW-----PDSHHPVITITAPCNGDCS----TVDKTQLEFFKIDGAG	118
4EIS/1-224	74	LRWTIW-----PDSHHPVITITAPCNGDCS----TVDKTQLEFFKIDGAG	118
giberella_zeae 7/1-251	103	LRWSGW-----PENHSGPILNITANCNGPCE----RVDKTKLEFFKIDGLG	144
fusarium_oxysporum 3/1-252	104	LRWSGW-----PENHSGPILNITANCNGPCE----RVDKTELEFFKIDGLG	145
nectria_heamatococcuss 1/1-252	104	IKWSSW-----PENHSGPILNITANCNGPCE----RVDKTSLRFFKIDGAG	145
verticillium_albo_atrum 13/1-24	95	LKWSPW-----PESHKGPVIDITANCNGDCT----TVDKTALRFFKIDGAG	136
verticillium_dahliae 4/1-241	95	LKWSPW-----PESHKGPVIDITANCNGDCT----TVDKTALRFFKIDGAG	136
neurospora_tetrasperma 2/1-24	95	LQWDQW-----PESHKGPVIDITANCNGDCE----SVDKTALKFFKIDGAG	136
TYPE3:NCU07760/1-240	95	LQWDQW-----PESHKGPVIDITANCNGDCE----SVDKTALKFFKIDGAG	136
magna_porte_oryzae 16/1-243	95	LQWDTW-----PESHHPVIDITANCNGPCE----TVDKTSLRFFKIDGAG	136
podospora_anseria 31/1-244	97	IVWTPPEW-----PESHHPVIDITANCNGPCE----TVDKTSLRFFKIDGAG	139
hypocrea_orientalis 1/1-246	98	FQWVPV-----PWPHPGPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	139
trichoderma_SP_SSL 1/1-246	98	LQWVPV-----PWPHPGPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	139
Hypocrea_virens 3/1-246	98	IQWVPI-----PWPHPGPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	139
trichoderma_atroviride 2/1-246	98	FQWVPV-----PWPHPGPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	139
hypocrea_rufa 1/1-246	98	FQWVPV-----PWPHPGPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	139
hypocrea_rufa 2/1-246	98	FQWVPV-----PWPHPGPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	139
trichoderma_saturnusporum 1/1-	98	FQWVPL-----PWPHPGPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	139
aspergillus_kawachii 37/1-247	98	IQWTAW-----PDSHHPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	139
aspergillus_tereus 6/1-245	96	LQWTEW-----PESHHPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	138
neosartorya_fischeri 4/1-247	98	IQWTTW-----PDSHHPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	139
aspergillus_fumingatus 4/1-247	98	IQWTAW-----PDSHHPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	139
aspergillus_tereus 10/1-245	97	LQWNTW-----PESHHPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	138
chaetomium_globosum 5/1-220	98	IQWDTW-----PESHHPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	140
TYPE3:NCU05969/1-243	97	IQWETW-----PESHHPVIDITANCNGDCE----TVDKTSLRFFKIDGAG	139
2VTC/1-228	80	FQWGPV-----WHPYGPVITVVECSGSCST--TVNKNLRLVFKIQDAG	122
aspergillus_fumingatus 1/1-245	96	FQWTEW-----PESHHPVIDITANCNGDCA----SVDKTSLRFFKIDGAG	137
neosartorya_fischeri 1/1-245	96	FQWTEW-----PESHHPVIDITANCNGDCA----SVDKTSLRFFKIDGAG	137
aspergillus_niger 1/1-245	96	MTWNTW-----PDDHHPVIDITANCNGSCS----DVDKTALQFFKIDAGG	137
aspergillus_kawachii 40/1-245	96	MTWNTW-----PDDHHPVIDITANCNGSCS----DVDKTALQFFKIDAGG	137
aspergillus_tereus 5/1-232	96	MQWNTW-----PESHHPVIDITANCNGDCA----QADKSSLEFFKIDGAG	137
emmericella nidulans 9/1-245	96	LQWTEW-----PESHHPVIDITANCNGDCT----TVDKTSLRFFKIDGAG	137
penicillium_chrysogenum 2/1-245	96	LQWTEW-----PESHHPVIDITANCNGDCT----TVDKTSLRFFKIDGAG	137
aspergillus_niger 2/1-245	96	LQWTDW-----PSSHHPVIDITANCNGDCT----DVTKTDLEFFKIDGAG	137
aspergillus_niger 12/1-244	96	LQWTDW-----PSSHHPVIDITANCNGDCT----DVTKTDLEFFKIDGAG	137
aspergillus_kawachii 38/1-245	96	LQWTDW-----PSSHHPVIDITANCNGDCT----DVTKTDLEFFKIDGAG	137
zea_mys 1/1-245	96	LQWTDW-----PSSHHPVIDITANCNGDCT----DVTKTDLEFFKIDGAG	137
aspergillus_clavatus 6/1-241	96	FQWTPW-----PESHHPVIDITANCNGDCA----SVDKSGLRFFKIDGAG	137
aspergillus_tereus 8/1-241	96	LQWTEW-----PESHHPVIDITANCNGDCT----SVDKTSLRFFKIDGAG	137
aspergillus_oryzae 7/1-242	95	LQWTAW-----PESHHPVIDITANCNGDCA----TVDKTQLEFFKIDGAG	136
aspergillus_favus 5/1-242	95	LQWTAW-----PESHHPVIDITANCNGDCA----TVDKTQLEFFKIDGAG	136
glomerella_graminic 4/1-242	98	VFWDTW-----PQSHHPVIDITANCNGDCA----TVDKSGLRFFKIDGAG	139
aspergillus_fumingatus 3/1-238	91	MKLAVGA-----TMQHPGPALVMSKAPSSAK--TYE-GDGDWFKIHEEG	132
cholletotrichum_higginsianum 2	91	FKLGVGA-----TMQHPGPALVMSKAPSSAK--AYE-GDGDWFKIHEEG	132
glomerella_graminic 7/1-238	91	FKLGVGA-----TMQHPGPALVMSKAPSSAK--AYE-GDGDWFKIHEEG	132
aspergillus_clavatus 5/1-238	91	LKLAVNA-----HIQHPGPALVMSKAPNGVK--NYQ-GDGDWFKIHEEG	132
aspergillus_oryzae 5/1-238	91	MKLGVGA-----TMKHPGPALVMSKAPSSAK--TYQ-GDGDWFKIHEEG	132
aspergillus_favus 3/1-238	91	MKLGVGA-----TMKHPGPALVMSKAPSSAK--TYQ-GDGDWFKIHEEG	132
aspergillus_niger 9/1-238	91	MKLGVGA-----TMKHPGPALVMSKAPSSAK--QYE-GDGDWFKIHEEG	132
emmericella nidulans 6/1-238	91	MKLGVGA-----TMQHPGPALVMSKAPGAAN--QYE-GDGDWFKIHEEG	132
aspergillus_clavatus 1/1-238	91	MKLAVGA-----TFQHPGPALVMSKAPSSAK--AYQ-GDGDWFKIHEEG	132
neosartorya_fischeri 7/1-238	91	LKLAVGA-----TMQHPGPALVMSKAPSSAK--SYE-GDGDWFKIHEEG	132

89	MKLAVGA	---	TMCHPGPALVYMS	KAPT	TA	---	EYE	-	GDGE	WFKI	HQES	130
91	VKLAVGA	---	TMCHPGPALVYMS	KAPATA		---	AYE	-	GNGE	WFKI	FEES	132
91	VKLAVGA	---	TMCHPGPALVYMS	KAPT	TA	---	SYE	-	GDGE	WFKI	FEES	132
83	EKLSFNE	---	KIEHPGCGFVYYS	KAPSKVN		---	TYD	-	GSGE	WTKVM	QMSC	124
83	EKLAFGE	---	KIEHPGPGFVYIA	KAPGAVK		---	SYD	-	GSGD	WTKVM	ESG	124
67	EKLAYDE	---	LIEHPGCGFVYIS	KAPGKVN		---	NYD	-	GSGE	WTKVM	QMSC	108
84	EKFVFNE	---	FIEHPGPGFVIYS	KAPGSA		---	TYD	-	GSGE	WFKVY	ETG	125
83	EKLWFNE	---	FIEHPGPGFVYMS	KVSGSLN		---	GVD	-	GSGD	WFKVY	ETG	124
83	EKLWFNE	---	FIEHPGPGFVYMS	KAPGDLN		---	SYD	-	GSGD	WFKVY	ESG	124
82	EKLFFNE	---	FIEHPGPGFVYMS	LAPNGVA		---	NYD	-	GSGD	WFKVY	ETG	123
86	FQLAYGA	---	EMKHPPGLQIYMS	KAPGDVK		---	SYD	-	GSGD	WFKVY	HQEG	127
86	FQLAYGA	---	SMKHPPGLQVYMS	KAPGDVK		---	EYD	-	GSGD	WFKVY	HQEG	127
86	FQLAYGA	---	SMKHPPGLQIYMS	KAPGDVK		---	TYD	-	GSGD	WFKVY	HQEG	127
86	FQLAYGA	---	EMKHPPGLQIYMS	KAPGDVR		---	SYD	-	GSGD	WFKVY	HQEG	127
68	EKANS	---	IYHPPGLLDVYMS	PASPAANS		---	PEAG	TG	QV	WFKI	YEEK	109
60	EYANPD	---	VIYHPPGVQFYMARV	PDGEDI		---	NSWN	GDGA	VWFKVY	EDH		102
60	EYANPD	---	VIYHPPGVQFYMARV	PDGEDI		---	NSWN	GDGA	VWFKVY	EDH		102

	190	200	210	220	230	240
124	AITN-----	GGTSISWPSVGMQSVFTFLPAS	IPDP	QCYFVRAEDTALHVA	ESYGGAAQF	175
124	AVTD-----	GGSTIEFPGTNITEITFD	IPKALPS	CEYLLVRAEHTALHNA	KGGAQF	174
123	PVTN-----	GGSSISFPGSDIDTITFT	IPKSLPS	CDYLIRAEHTALHSA	SASSFGGAQF	174
120	PNFG-----	SQLTWPSNGKSSFDVS	IPSCIKAK	QYLLRAEHTALHVA	QSSGGAAQF	169
119	PKFG-----	SQLTWLS--AANYNIN	IPSCIAP	QYLLMRNEHTAIHTA	GTRGGAQF	166
119	PKFG-----	SQLTWLS--AASYNIN	IPSCIAP	QYLLMRNEHTALHTA	GSRGGAQF	166
117	PKFG-----	SQLTWLA--AANYDIK	IPSCIAP	QYLLMRNEHTAIHTA	AGTKGGAQF	164
120	PTFG-----	QQLGWPSLNGKSFVPT	IPRCIRS	QYLLRAEHTALHSA	SASSPGGAQF	169
121	PTFG-----	AQLTWPGSTGKSSFVAP	IPPCIKS	QYLLRAEHTALHVA	QSVGGAQF	171
120	PQFG-----	AQLTWPSNGKSSFVPT	IPSCIRAY	LLRAEHTALHVA	QSGGAAQF	169
124	PTFG-----	QLTWSSNGKSSFPVK	IPSCIKS	QYLLRAEHTALHVA	QSSGAQF	173
125	PTVT-----	DDGLTWPSDGAATNVNFT	IPSSLPD	CDYLLRVEHTALHCA	GATEGGAQF	175
124	PKFN-----	ADGLTWPEGTAGTQVTE	LDPAALPD	CDYLVVREHTALHSA	NTEGGAQF	174
125	PSGL-----	GTSGIKWPSDGKTEVSVQ	IPSCIANC	YLLRVEHTALHSA	GSVGGAAQ	176
126	EKV-----	TSGNLEWASLNALVLSAK	IPSCICLAS	CEYLLVREHTALHAG	ADTGAQF	176
86	PTI-----	TSSSISWPS-GQTQVFVT	IPSCIAP	CEYLLRVEHTALHSA	GSAGGAQ	135
124	PSF-----	SGGQLTWPSNGKTEVDVT	IPKSLPS	CEYLLRGEHTALHSA	GSAGGAQF	174
122	ATF-----	GGQMTFASAGKTQVTFPL	IPKSLPS	CEYLLRVEHTALHSA	TSVGGAAQF	172
124	ENGL-----	GTDSTITWPSAGKTEVSV	IPSCIED	CEYLLRVEHTALHSA	AGTSVGGAAQF	175
125	PSGL-----	GTSNITWPSGKTEVSVK	IPSCIAP	CDYLLRVEHTALHSA	STVGGAAQF	176
125	PSGL-----	GTGNLKWPSDGKTQVSVK	IPSCVQNG	CD---	TPPEKHLTNILP	171
125	PGGL-----	GTSSLTWPSYQKTEVSVQ	IPHCIQD	CDYLLRVEHTALHSA	SSIGGAAQ	176
125	PMGL-----	GTGQLTWPSAGATEVSVK	IPSCILES	CEYLLRVEHTALHSA	GSVGGAAQ	176
121	ADFS-----	SGQATWTLASDYTYTAT	IPPECIPP	CDYLLRTOQIGIHN	PWPAGTPOF	169
119	ATFP-----	GGGWTLSDTYTFT	IPSCIPS	CDYLLRTOQIGIHN	PWPAGTPOF	165
120	ATFP-----	GGEWTLSDTYTFT	IPSCIPS	CDYLLRTOQIGIHN	PWPAGVPOF	166
120	ATFP-----	GGEWTLSDTYTFT	IPSCIPS	CDYLLRTOQIGIHN	PWPAGVPOF	166
121	PTFN-----	ADGTATWMAAGTYTIN	IPCCIPD	CDYLLRTOQSLATHN	PWPAGTPOF	170
122	PTIN-----	GGQSSWPMRSSYQANL	IPRCIPNC	CEYLLRTOQSLATHN	PG--STPOF	168
72	MDAN-----	GEWAVTRYLNKKGLVD	FAPISCS	PHYLLRAEHTALHGA	AGSYPGAQF	123
128	FSN-----	GVWGTERVINNAGKHNIT	IPKCIANC	QYLLRAEHTALHSA	SSYPGAQ	178
135	YNPS-----	TGSWGVTDLIANAGLHSIT	IPSCICLAN	QYLLRAEHTALHSA	GSSGGAQ	187
128	YNN-----	GQWGTSTVITNGGFQYID	IPACIPS	QYLLRAEHTALHAA	STAGAAQ	178
129	LNVA-----	TQGWATTDLINNAGVQSIT	IPSCICIAN	QYLLRAEHTALHSA	GAGSGPAQ	181
135	LNVA-----	TQGWATTDLINNAGVQSIT	IPSCICIAN	QYLLRAEHTALHSA	GAGSGGAQ	187
135	LNVA-----	TQGWATTDLINNAGVQSIT	IPSCICIAN	QYLLRAEHTALHSA	GAGSGGAQ	187
124	FDG-----	SKWGVDRLIANKGVQTVK	IPACIAP	QYLLRGEHTALHSA	SASSMGAQF	174
131	FDG-----	TTWGTERVINGQGRHKIK	IPPECIEP	QYLLRAEHTALHCA	SNYPGAQF	181
131	FSN-----	GVWGTEKVIINGQGRHSIK	IPPECIAP	QYLLRAEHTALHGA	GSYPGAQF	181
130	YNN-----	GVWGTEKVIINGQGRHSIK	IPPECIAP	QYLLRAEHTALHGA	SNYPGAQF	180
131	LTN-----	GVWGTERVINGQGRHNKIK	IPPECIAP	QYLLRAEHTALHGA	SANYPGAQF	181
131	MDSS-----	GVWGTERVINGQGRHSIK	IPPECIAP	QYLLRAEHTALHAA	SNYPGAQF	182
131	MDSS-----	GVWGTERVINGQGRHSIK	IPPECIAP	QYLLRAEHTALHAA	SNYPGAQF	182
131	MDSS-----	GVWGTERVINGQGRHSIK	IPPECIAP	QYLLRAEHTALHAA	SNYPGAQF	182
131	MDAN-----	GVWGTERVINGQGRQSIK	IPPECIAP	QYLLRAEHTALHSA	AGNYPGAQF	182
106	LASN-----	PNYYGSQVLNDNCGHYFT	VPNVN	APNYLLRAEHTALHVA	SSVGGAAQF	158
125	YKGT-----	ATWGTIELNANCGKRAFT	VPKNIAS	CDYLVRAEHTALHAG	--AGSQP	175
125	YGTG-----	ASWGTIELNANCGKRAFT	VPKNIAS	CDYLVRAEHTALHAG	--AGNPQP	175
125	YSGT-----	ASWGTIELNANCGKRAFT	VPKNIAS	CDYLVRAEHTALHAG	--VGQPOP	175
125	HAGTV-----	ATWGTIELNANCGKRAFT	VPKSLAS	CDYLVRAEHTALHAG	--AGNAQP	175
125	YKGT-----	ATWGTIELNANCGKRAFT	VPKNIAS	CDYLVRAEHTALHAG	--ANQPQP	175
110	YNPST-----	KKWGTDSLNCNCGKRAFT	IPSSLAP	CDYLLRAEHTALHSA	SSAGGAQF	162
128	WAKNPSGGSGDDDWYGT	KDNLSCGKMNVK	IPADLPS	CDYLLRAEHTALHTA	GSAGGAQF	187
12						

pyrenophora_teres_17/1-233
 pyrenophora_trici_repentis_8/
 chaetomium_globosum_22/1-239
 thievela_terestis_17/1-240
 glomerrela_graminic_32/1-232
 verticillium_dahliae_23/1-243
 verticillium_albo_atrum_15/1-21
 glomerrela_graminic_17/1-244
 chaetomium_globosum_23/1-244
 podospira_anseria_29/1-244
 chaetomium_thermophilum_15/1-2
 sodaria_macrospora_16/1-245
 myceliophthora_thermophilia_5/
 thievela_terestis_2/1-244
 Paravalisa_indica_13/1-241
 Paravalisa_indica_12/1-241
 myceliophthora_thermophilia_6/
 chaetomium_globosum_31/1-241
 podospira_anseria_4/1-241
 sodaria_macrospora_2/1-240
 neurospora_tetrasperma_16/1-24
 neurospora_tetrasperma_14/1-24
 TYPE2:NCU02916/1-241
 4EIR/1-223
 pyrenophora_trici_repentis_22/
 verticillium_dahliae_24/1-222
 verticillium_albo_atrum_16/1-21
 verticillium_dahliae_26/1-221
 3ZUD/1-228
 TYPE3:NCU07898/1-239
 2YET/1-228
 thermoascus_auranti_1/1-228
 4EIS/1-224
 giberella_zeae_7/1-251
 fusarium_oxysporum_3/1-252
 nectria_heamatococcuss_1/1-252
 verticillium_albo_atrum_13/1-24
 verticillium_dahliae_4/1-241
 neurospora_tetrasperma_2/1-24
 TYPE3:NCU07760/1-240
 magna_porte_oryzae_16/1-243
 podospira_anseria_31/1-244
 hypocrea_orientalis_1/1-246
 trichoderma_SP_SSL_1/1-246
 Hypocrea_virens_3/1-246
 trichoderma_atroviride_2/1-246
 hypocrea_rufa_1/1-246
 hypocrea_rufa_2/1-246
 trichoderma_saturnusporum_1/1-
 aspergillus_kawachii_37/1-247
 aspergillus_tereus_6/1-245
 neosartorya_fischeri_4/1-247
 aspergillus_fumingatus_4/1-247
 aspergillus_tereus_10/1-245
 chaetomium_globosum_5/1-220
 TYPE3:NCU05969/1-243
 2VTC/1-228
 aspergillus_fumingatus_1/1-245
 neosartorya_fischeri_1/1-245
 aspergillus_niger_1/1-245
 aspergillus_kawachii_40/1-245
 aspergillus_tereus_5/1-232
 emmericella nidulans_9/1-245
 penicillium_chrysogenum_2/1-245
 aspergillus_niger_2/1-245
 aspergillus_niger_12/1-244
 aspergillus_kawachii_38/1-245
 zea_mys_1/1-245
 aspergillus_clavatus_6/1-241
 aspergillus_tereus_8/1-241
 aspergillus_oryzae_7/1-242
 aspergillus_favus_5/1-242
 glomerrela_graminic_4/1-242
 aspergillus_fumingatus_3/1-238
 chollototrichum_higginsianum_2
 glomerrela_graminic_7/1-238
 aspergillus_clavatus_5/1-238

122 WAKNTGGGGGSDDYWGTDKLNKNCCKMDVKIPANLASDYLLRAEATLHAASGLGGAOF 181
 122 WAKNTGGGGGSDDYWGTDKLNKNCCKMDVKIPANLASDYLLRAEATLHAASGLGGAOF 181
 128 WAKKSGGGSGDDDYWGVDLNAACCKMDVKIPSDIAPCDYLLRAEATLHTAGGAGGAOL 187
 129 WAKNPSGSTGDDDYWGTDKLNKNCCKMNVKIPEDIAPCDYLLRAEATLHVAASSGGAOF 188
 128 YFANN-----NTWGNLDLINEGCGKQNVVTPADIAPCDYLLRAEATLHAAGSSVDGAQY 180
 131 FDNTR-----GIWGVNLLQQDGWTYFDFEPIAPCDYLLRVELLALHSAVVPKGSQOF 183
 109 FDNTR-----GIWGVNLLQQDGWTYFDFEPIAPCDYLLRVELLALHSAVVPKGSQOF 161
 132 LDTGS-----GQWAVDRMIGGGGWSYFDLPRCIAPCDYLLRVELLALHSAVYSGKGACF 184
 132 FDTGS-----RVWGVNLLKNNGWVYFNLPCQVASSQYLLRVELLALHSAKQKQGAOF 184
 132 FDQGS-----RKWGVDTVIONQGGWTYFNIPQCIAPCOYLLRVELLALHSAVVPKGSQOF 184
 132 FDTGS-----RKWGVDTMINNGWYFNLPCQCIAPCOYLLRVELLALHSAVVPKGSQOF 184
 133 FETSS-----RKWGVDNMLQNGWTYFNLPNCIAPCOYLLRVELLALHSAVVPKGSQOF 185
 132 FNPST-----KTWGVNLLKNNGWVYFNLPCQCIAPCOYLLRVELLALHSAVYSGKGACF 184
 132 FDTSS-----KTWGVNLLKNNGWVYFNLPCQCIAPCOYLLRVELLALHSAVYSGKGACF 184
 131 LSGG-----RWAVDTMIANNMGWSFKLPSCIAPCOYLLRVELLALHSAVVPKGSQOF 181
 131 LNGG-----KWAVDTMIANNMGWSFKLPSCIAPCOYLLRVELLALHSAVYSGKGACF 181
 131 LNNG-----VWAVDELIAANGWHYFNLPCQVAPCOYLLRVELLALHSAVVPKGSQOF 181
 131 VVNG-----VWAVDEMISNNGWHYFNLPCQVAPCOYLLRVELLALHSAVVPKGSQOF 181
 131 LNNG-----VWAVDNMISNNGWHYFNLPCQVAPCOYLLRVELLALHSAVVPKGSQOF 181
 131 FSGG-----KWAVDDLIAANGWSYFDMPTCIAPCOYLLRVELLALHSAVYSGKGACF 181
 131 LSNQ-----KWAVDDLIAANGWSYFDMPTCIAPCOYLLRVELLALHSAVYSGKGACF 181
 131 LSNQ-----KWAVDDLIAANGWSYFDMPTCIAPCOYLLRVELLALHSAVYSGKGACF 181
 131 LSNQ-----KWAVDDLIAANGWSYFDMPTCIAPCOYLLRVELLALHSAVYSGKGACF 181
 116 MDSG-----GVWGTERTVINGKGRHSIKIPECIAPCOYLLRAEATLHAASGLGGAOF 167
 111 YNSAT-----DRWCTDEIIDNNGLLSVNLKGLKGGDYLLRAEATLHAASGLGGAOF 162
 123 NTP-----GMNSQFAVEMTEISTTIIPASLRPNYLLRAEATLHAASGLGGAOF 168
 118 NTP-----GVNNQFAVEMTEVFTTIIPASLRPNYLLRAEATLHAASGLGGAOF 163
 123 DLG-----GPYPAFETEMREISTTIIPKTLPNCDYLLRAEATLHAASGLGGAOF 168
 119 LINDDN-----PPGIWASDNLIAANNSWTVTIPTTIAPCOYLLRVELLALHSAVVPKGSQOF 174
 134 REGTS-----NVWAATPLMTAPANYEYAIIPCLKPCYLLRVELLALHSAVVPKGSQOF 186
 119 LINDDN-----PPGIWASDNLIAANNSWTVTIPTTIAPCOYLLRVELLALHSAVVPKGSQOF 174
 119 LINDDN-----PPGIWASDNLIAANNSWTVTIPTTIAPCOYLLRVELLALHSAVVPKGSQOF 174
 119 REGTS-----NVWAATPLMTAPANYEYAIIPCLKPCYLLRVELLALHSAVVPKGSQOF 171
 145 LLEQGT-----PGRYADSVLQENGDRWNVRIPENIASCOYLLRVELLALHSAVVPKGSQOF 199
 146 LLEQGT-----PGRYADSVLQENGDRWNVRIPENIASCOYLLRVELLALHSAVVPKGSQOF 200
 146 LISQDR-----PGKYADGALRENGYTWSVRIPENIASCOYLLRVELLALHSAVVPKGSQOF 200
 137 LLDAA-----NSNWAADDELIAAGEVWEVTTIPDIAPCOYLLRVELLALHSAVVPKGSQOF 190
 137 LLDAA-----SSNWAADDELIAAGEVWEVTTIPDIAPCOYLLRVELLALHSAVVPKGSQOF 190
 137 YDATN-----GWASDVLIKDGNWSWVVEIPENIKPCYLLRVELLALHSAVVPKGSQOF 188
 137 YDATN-----GWASDVLIKDGNWSWVVEIPENIKPCYLLRVELLALHSAVVPKGSQOF 188
 137 YISGSP-----PGYWASDELIKNGFSWVVOIPASIPCOYLLRVELLALHSAVVPKGSQOF 191
 140 YNPNT-----RTWAADDLRANGNSWLVIIPADLAPCOYLLRVELLALHSAVVPKGSQOF 192
 140 LISGGD-----PGNWAADDLRANGNSWLVIIPADLAPCOYLLRVELLALHSAVVPKGSQOF 194
 140 LISGGD-----PGNWAADDLRANGNSWLVIIPADLAPCOYLLRVELLALHSAVVPKGSQOF 194
 140 LISGGN-----PGRWASDVLIGNGTWSWVVOIPADLAPCOYLLRVELLALHSAVVPKGSQOF 194
 140 LLSGGN-----PGTWASDVLIGNGTWSWVVOIPADLAPCOYLLRVELLALHSAVVPKGSQOF 194
 140 LLSGGD-----PGTWASDVLISNNNTWVVKIPDNLAPCOYLLRVELLALHSAVVPKGSQOF 194
 140 LLSGGD-----PGTWASDVLISNNNTWVVKIPDNLAPCOYLLRVELLALHSAVVPKGSQOF 194
 140 LISGGD-----PGNWAADDLRANGNSWLVIIPADLAPCOYLLRVELLALHSAVVPKGSQOF 194
 140 LVSDSE-----VPGTWGTDQLINNNSWVVEIPPSIAACNYVLRREELLALHSAVVPKGSQOF 195
 139 LVDAA-----PPGVWAGDQLIANNSWVVEIPADIAPCOYLLRVELLALHSAVVPKGSQOF 194
 140 LVDGST-----PPGVWAGDQLIANNSWVVEIPADIAPCOYLLRVELLALHSAVVPKGSQOF 195
 140 LVDGSN-----PPGVWAGDQLIANNSWVVEIPADIAPCOYLLRVELLALHSAVVPKGSQOF 195
 139 LVDDTT-----PPGIWAGDQLIANNSWVVEIPPSIAACNYVLRREELLALHSAVVPKGSQOF 194
 141 LIDGTN-----APGFWASDQLIANNSWVVEIPADIAPCOYLLRVELLALHSAVVPKGSQOF 196
 140 LVDGQK-----WGSQDQLIANNSWVVEIPADIAPCOYLLRVELLALHSAVVPKGSQOF 191
 123 INXNT-----QVWAQDQLINGKNTWVKIPSSLRPNYVLRREELLALHSAVVPKGSQOF 175
 138 LISDSN-----VPGTWASDNLIAANNSWTVTPSSIAACNYVLRREELLALHSAVVPKGSQOF 193
 138 LISDSN-----VPGTWASDNLIAANNSWTVTPSSIAACNYVLRREELLALHSAVVPKGSQOF 193
 138 LIDDSE-----IPGTWATDKLIDNNYTRISITIPSDIEACNYVLRREELLALHSAVVPKGSQOF 193
 138 LIDDSE-----IPGTWATDKLIDNNYTRISITIPSDIEACNYVLRREELLALHSAVVPKGSQOF 193
 138 LIDGSS-----PPGQWATDELISNNNTAVVTIPASIASCOYLLRVELLALHSAVVPKGSQOF 193
 138 LVDGSS-----APGTWASDNLISNNNTAVVTIPSSIAACNYVLRREELLALHSAVVPKGSQOF 193
 138 LIDGSN-----APGKWASDELIAANNSASVTIPSSIAACNYVLRREELLALHSAVVPKGSQOF 193
 138 LISDTE-----VPGTWATDNLISNNNTAVVTIPSTLEACNYVLRREELLALHSAVVPKGSQOF 193
 138 LISDTE-----VPGTWATDNLISNNNTAVVTIPSTLEACNYVLRREELLALHSAVVPKGSQOF 193
 138 LISDTE-----VPGTWATDNLISNNNTAVVTIPSTLEACNYVLRREELLALHSAVVPKGSQOF 193
 138 LISDTE-----VPGTWATDNLISNNNTAVVTIPSTLEACNYVLRREELLALHSAVVPKGSQOF 193
 138 LIGS-----GHWASDDLIAANNSWTVTPSSIAACNYVLRREELLALHSAVVPKGSQOF 189
 138 LIEGN-----TWASDQLISNNNTAVVTIPSSIAACNYVLRREELLALHSAVVPKGSQOF 189
 137 LISGSD-----NTWASDNLISNNNTAVVTIPSSIAACNYVLRREELLALHSAVVPKGSQOF 190
 137 LISGSD-----NTWATDNLISNNNTAVVTIPSSIAACNYVLRREELLALHSAVVPKGSQOF 190
 140 LNSG-----KWPTDELIAANNSWAVTVPSLKPCKYVVRREELLALHSAVVPKGSQOF 190
 133 VCNKN-----ADFTKDAWCTWCKDRIEFTIPADLPDCEYLIRREELLALHSAVVPKGSQOF 185
 133 VCNKG-----GDFKGNACWCTWCKDRIEFTIPADLPDCEYLIRREELLALHSAVVPKGSQOF 185
 133 VCNKN-----GAFTSDAWCTWCKDRIEFTIPADLPDCEYLIRREELLALHSAVVPKGSQOF 185
 133 VCNKN-----ADFTREAWCSYNKDRVEFTIPADLPDCEYLIRREELLALHSAVVPKGSQOF 185

aspergillus_oryzae_5/1-238 133 ICDKN-----KDVKSDAWCSYDKDRVEFTIPKDLADCEYLIRAEHIQVHGAAH-AGEAEF 185

aspergillus_favus_3/1-238 133 ICDKN-----KDVKSDAWCSYDKDRVEFTIPKDLADCEYLIRAEHIQVHGAAH-AGEAEF 185

aspergillus_niger_9/1-238 133 ICDS-----KDIKTDAWCTWDKDRIEFTVPADLPDCEYLIRAEHIQVHGAAH-DGQAEF 185

emmericella nidulans_6/1-238 133 ICDS-----KDIKTDAWCTWDKDRIEFTIPADLPDCEYLIRAEHIQVHGAAH-DGQAEF 185

aspergillus_clavatus_1/1-238 133 VCNKN-----ADFTRDAWCTWGKDRIEFTIPADLPDCEYLIRAEHIQVHGAAH-VGQAEF 185

neosartorya_fischeri_7/1-238 133 VCNKN-----ADFTKNAWCTWDKDRIEFTIPSDLPDCEYLIRAEHIQLHGAAH-DGQAEF 185

penicillium_chrysogenum_4/1-236 131 VCDKN-----KDFTKDAWCTWDKDRIEFTIPASLPPDCEYLIRAEHIQVHGAAH-GGEAEF 183

verticillium_albo_atrum_17/1-21 132 -----DTPDCEYLIRAEHIQVHGAAH-VGQAEF 158

verticillium_albo_atrum_17/1-2 132 -----DTPDCEYLIRAEHIQVHGSH-AQOAEF 158

pyrenophora_teres_22/1-230 125 LKNPS-----TPGVDTAWENWQQDRLEWTIQKNIPACEYLVRVEHTAIHEGH-VGKAOF 177

Phaeosphaeria_nodorum_4/1-230 125 LKNPS-----TPGVDTAWDSWQRLEWKIQNSIPACEYLVRVEHTAIHEGH-VGKAOF 177

pyrenophora_trici_repentis_23/ 109 LKNPS-----TPGVDTAWESWQRLEWTIORSVPAQEYLVRVEHTAIHEGH-VG---- 157

podospora_anseria_17/1-231 126 LCRGG-----GNVDTNWCSWQRLEFTIPPPTPPCEYLVRVEHTAIHEGH-VRRAOF 17

glomerrela_graminic_16/1-230 125 LCGGQ-----PNVDTSWCTWQKDRIEFTIPNRIPPPQYLVRVEHTAIHEAH-VGKAOF 17

glomerrela_graminic_31/1-230 125 LCGSN-----PSVDDTWCWQKDRIEFTIPATPAPPQYLVRVEHTAIHEGH-VGKAOF 176

chaetomium_globosum_15/1-229 124 LCRGN-----AASDGNWSCYNKRLEFVIPKPTPPCEYLVRVEHTAIHEGF-KNRAOF 175

neosartorya_fischeri_2/1-235 128 LCADTS-----KGIVDEDWCTWGKDTASFKEIPEDTPAQYLVRVEHTAIHRGF-LGESEF 181

aspergillus_tereus_12/1-235 128 VCSDIS-----DGLVDTDWCTWGKDTVFKEKIPSDMPPPQYLVRVEHTAIHRGF-SGNSEF 181

aspergillus_favus_7/1-235 128 VCEDIS-----DGLKDDTWCTWGKDTASFKEIPKPTPPQYLVRVEHTAIHRGF-SGNSEF 181

aspergillus_fumingatus_6/1-235 128 LCADTS-----NGIKDETWCTWGKDTASFKEIPQDPAGQYLVRVEHTAIHRGF-LGEAEF 181

4B5Q/1-217 110 PQFE-----NKQLVF---DTTQQEVFTTIPKSLSPSCQYLLRTEQTALHVASSYGGAOF 159

3EJA/1-208 103 PTFG-----AQLTWPSTCKSSFAVPIPCIKSGYLLRAEQIGLHVAQS VGGAOF 152

3EII/1-208 103 PTFG-----AQLTWPSTCKSSFAVPIPCIKSGYLLRAEQIGLHVAQS VGGAOF 152

		250	260	270	280	290	300	
serpula_lacrymans_5/1-229	176	YLSCAQINVTGGNGTGP---	GPLVSIPGVYTGNPEGILNIYSPI----	PANYT----	QP			224
schizozophylum_communne_15/1-228	175	YLSCAQKVITGGGNGSP---	GPLVSIPGVYDGNPEGIKNIYSPI----	PANYS----	QP			223
schizozophylum_communne_16/1-228	175	YLSCAQKVITGGGNGSP---	GPLVSIPGVYTGNPEGILNIYYPV----	PANYT----	MP			223
chaetomium_globosum_8/1-223	170	YISCAQIEVTGGGSTEP---	SNKVSFPFGAYKASDPGILINIINWPI----	PTS YQ----	NP			218
pyrenophora_trici_repentis_13/	167	YISCAQIEVTGGGSTKP---	TNLVAFPGAYSATDPGILINIINYPI----	PTS YK----	NP			215
pyrenophora_teres_11/1-209	167	YL-----SKAP---	TNLVAFPGAYSATDPGILINIINYPI----	PTS YK----	NP			204
Phaeosphaeria_nodorum_18/1-21	165	YLSCAQLEVTGGGSTAP---	KNLVAFPGAYSATDPGILINIINYPI----	PTS YK----	NP			213
podospora_anseria_18/1-223	170	YISCAQIEVTGGGNETP---	SNKVSFPFGAYSASDPGIQINIINWPI----	PTS YR----	NP			218
thievela_terestis_18/1-224	171	YISCAQLSVITGGGSTEP---	PNKVAFPGAYSATDPGILINIYYPV----	PTS YQ----	NP			219
myceliophthora_thermophilia_21	170	YISCAQLSVITGGGSTEP---	SQKVSFPFGAYKSTDPGILINIYPV----	PTS YQ----	NP			218
TYPE1:NCU03328/1-229	174	YISCAQLSVITGGGSTEPGANKYKVSFPFGAYKASDPGILINIYPV----	PTS YK----	NRAFP----	NP			224
emmericella_nidulans_3/1-229	176	YLSCGQVSVITGGGNDP---	APLVAFPGAYDPTDPGILINIYWVP----	PTNYT----	PP			224
aspergillus_tereus_4/1-228	175	YISCQGVIITGGGDGTP---	GPLVAFPGAYSPTDPGILIDIIYPV----	PT EYT----	PP			223
podospora_anseria_11/1-231	177	YLSCAQISVTGGGSTTLN--TGQLVSFPFGAYKATDPGILFQLYWPT----	PTS YT----	NP				226
glomerrela_graminic_6/1-230	177	YLSCAQVSLSCGGSTTP---	SGLVSFPGAYKATDPGILFKLYWPI----	PTS YT----	NP			225
arthrobotrys_oligospora_11/1-1	136	YLACGQINVTGGGSKAG---	TPLVSFPFGAYKATDPGILLINIYWPI----	PTS YT----	NP			184
pyrenophora_trici_repentis_20/	175	YISCAQLKVENGNGSP---	GPKVAFPGAYKATDPGIMINIYYPV----	PTS YT----	AP			223
Phaeosphaeria_nodorum_28/1-22	173	YISCAQIKVENGENGSP---	TDLVAFPGAYKATDPGILINIVYYPV----	PTS YT----	PP			221
myceliophthora_thermophilia_16	176	YIACAQLSVITGGSGTLN--TGSLVSLPGAYKATDPGILFQLYWPI----	PT EYI----	NP				225
thievela_terestis_11/1-231	177	YLACAQLVITGGGTGTLN--TGELVAFPGAYSATDPGILFQLYWPI----	PTS YT----	NP				226
chaetomium_globosum_24/1-226	172	YISCAQLSVITGGSGTIN--TGSLVSFPFGAYKATDPGILFQLYWPI----	PTS YV----	NP				221
chaetomium_thermophilum_14/1-23	177	YIACAQLVITGGGTGTLN--TGQLVSFPFGAYKATDPGILFQLYWPP----	PTS YI----	NP				226
TYPE1:NCU02344/1-232	177	YIACAQLNVITGGGTINTSGKLVSFPFGAYKATDPGILBNLYYPA----	PTS YT----	NP				227
myceliophthora_thermophilia_2/	170	YISCAQITVTGGGSANP---	GPTVSIPGA EKETDPGYTVNIYNN----	FHNYT----	VP			217
sodaria_macrospora_4/1-217	166	YLSCAHISVTGGGSAS---	PATVSIPGA EKETDPGYTIANIYSN----	FNSYT----	VP			212
neurospora_tetrasperma_12/1-21	167	YLSCAHISVTGGGSAS---	PATVSIPGA EKETDPGYTVNIYSN----	FNNYT----	VP			213
TYPE1:NCU00836/1-218	167	YLSCAHISVTGGGSAS---	PATVSIPGA EKETDPGYTVNIYSN----	FNNYT----	VP			213
thievela_terestis_7/1-223	171	YISCAQITVTGGGNGNP---	GPTALIPGA EKDTDPGYTVNIYTN----					

glarea_lozoyensis_1/1-214 163 YMTCYQVNVVTGCTETAN---PAGVKFPGAYKANDPGIQLINLYNN-----LQSYT---IP 209

myceliophthora_thermophilum_12 188 YMTCYQLNVVTGSSSSAS---PPTVSFPFGAYKATDPGILVNIHAP-----LSCYT---VP 234

chaetomium_thermophilum_7/1-24 189 YMTCYQLNVVTGSSSSAN---PATVKFPGAYSATDPGILVNIHSA-----MNNVY---VP 235

podospora_anseria_15/1-234 185 YMTCYQINIVSGGSSNAS---PATVRLPGAYGASEG--QVNIHAA-----LTSYT---AP 229

thievela_terestis_10/1-235 184 YMSCYQIIVSVSGSSAS---PATVKFPGAYSANDPGIHLNIHAA-----VSNVY---AP 230

podospora_anseria_24/1-240 189 YMTCYQIIVSVSGSSAS---PPTVSIPGHEKASDPGVQVNIHGA-----MTNVY---IP 235

pyrenophora_teres_17/1-233 182 YMTCFQIIVVTGSSSSS---PAGVSFPFGAYKATDPGIQLINLYQN-----LASVY---AP 228

pyrenophora_trici_repentis_8/ 182 YMTCYQIIVVTGSSSSS---PAGVSFPFGAYKAADPGIQLINLYQN-----LASVY---AP 228

chaetomium_globosum_22/1-239 188 YMTCYQLSVTGGSSAT---PATVSFPFGAYKSSDPGILVNIHSA-----MSCYT---VP 234

thievela_terestis_17/1-240 189 YMSCYQIIVVTGSSSAT---PSTVSFPFGAYSASDPGILVNIHAP-----MSTVY---VP 235

glomerrela_graminic_32/1-232 181 YMSCYQLKVEGSSSAK---PTGVTFPFGAYKATDPGLLINIYNK-----ITNVY---VP 227

verticillium_dahliae_23/1-243 184 YTSCVNLRVTRGNSFAP---EETFAIPGVYEANDPAITIMIYGN TGKPDNNLKPYT---PA 238

verticillium_albo_atrum_15/1-21 162 YTSCVNLRVTRGNSFAP---AETFAIPGVYEANDPAITIMIYGN T-----GEAQ---QF 210

glomerrela_graminic_17/1-244 185 YISCAQINRVVTGSSSTFSP---SSTVSFPFGAYQQSDPSIVINIYGAGGVPNNGKAYM---AP 239

chaetomium_globosum_23/1-244 185 YQSCAQINIVSGSSSLSP---SDTVSFPFGAYSASDPGILTSIYGSTGKPDNDGKAYM---AP 239

podospora_anseria_29/1-244 185 YKSCAQINIVSGSSSFTP---SQTVSFPFGAYQANHPGILTSIYGLTGQPDNGGKPYM---IP 239

chaetomium_thermophilum_15/1-2 185 YQSCAQINIVSGSSSFTP---SQTVSFPFGAYSQNDPGILVNIYGLTGQPDNGGKPYM---AP 239

sodaria_macrospora_16/1-245 186 YQSCAQINIVTSGSSSFTP---SSTVSFPFGAYKSNDPGILINIYGLKGQPDMDGKPYM---VP 240

myceliophthora_thermophilia_5/ 185 YQSCAQINIVSGSSSFTP---ASTVSFPFGAYSASDPGILINIYGATGQPDNNGQPYM---AP 239

thievela_terestis_2/1-244 185 YQSCAQINIVSGSSSFTP---SQTVSIPGVYSATDESILINIYGSTGQPDNGGKAYM---BP 239

Paravalsa_indica_13/1-241 182 YISCAQINIVTSGSSSFTP---SSTVSFPFGAYSSSDPGILISIYSSSGQPDNGGRAYM---FP 236

Paravalsa_indica_12/1-241 182 YISCAQINIVTSGSSSFTP---SSTVSFPFGAYSPTDPGILINIYSSSGQPDNGGKAYM---FP 236

myceliophthora_thermophilia_6/ 182 YMCQAQIEVVTGSSSTNSG---SDFVSFPFGAYSANDPGILISIMDSSGKPNNGGRSYP---IP 236

chaetomium_globosum_31/1-241 182 YMCQAQIEVVTGSSSTNSG---SNFVSFPFGAYPANHPGIVSISIMDSTGKPTMNGRYP---IP 236

podospora_anseria_4/1-241 182 YMCQAQIEVVTGSSSTNSG---SNFVSFPFGAYTADHPGILVSIIMDLQGRPTNNGRYP---IP 236

sodaria_macrospora_2/1-240 182 YIGCAQINIVTGGSSASP---SNTVSFPFGAYSASDPGILINIYGTGGSTNNGGRAYM---IP 235

neurospora_tetrasperma_16/1-24 182 YIGCAQINIVTGGSSASP---SNTVSFPFGAYSASDPGILINIYGGSGTTDNGGKPYM---IP 236

neurospora_tetrasperma_14/1-24 182 YIGCAQINIVTGGSSASP---SNTVSFPFGAYSASDPGILINIYGGSGKTDNGGKPYM---IP 236

TYPE2:NCU02916/1-241 182 YIGCAQINIVTGGSSASP---SNTVSFPFGAYSASDPGILINIYGGSGKTDNGGKPYM---IP 236

4EIR/1-223 168 YMCQAQLNVVGGTGAKT---PSTVSFPFGAYSGSDPGVKISIVWPP-----VTAYT---VP 216

pyrenophora_trici_repentis_22/ 163 YTCQAQIEVLQSSSNLVP---ESTVSIPGIMKYNTPTDFDIYNTP-----ASKVQ---IP 211

verticillium_dahliae_24/1-222 169 SLACAQQLVVTGSSSTDFP---ESFVSFPFGAYKADDAGILFDIYTST-----TKSYF---YP 217

verticillium_albo_atrum_16/1-21 164 SLACAQQLVVTGSSSTDFP---ESFVSFPFGAYKADDAGILFDIYAGT-----NNFYP---YP 212

verticillium_dahliae_26/1-221 169 YIACAQQLNVVSGGNGTTP---GPLYAFPGEYKEDPGLAVNIYAAS-----QRVE---YP 216

3ZUD/1-228 175 YPQCINLNVVTGSSSDN---PAGTLGTALYHDTDPGILINIYQK-----LSSYI---IP 221

TYPE3:NCU07898/1-239 187 YPQCINLNVVTGSSSTKTP---SSGLVSFPFGAYKSTDPGVTYDAYQA-----ATYT---IP 234

2YET/1-228 175 YPQCINLNVVTGSSSDN---PAGTLGTALYHDTDPGILINIYQK-----LSSYI---IP 221

thermoascus_auranti_1/1-228 175 YPQCINLNVVTGSSSDN---PAGTLGTALYHDTDPGILINIYQK-----LSSYI---IP 221

4EIS/1-224 172 YPQCINLNVVTGSSSTKTP---SSGLVSFPFGAYKSTDPGVTYDAYQA-----ATYT---IP 219

giberella_zeae_7/1-251 200 YPQCFNLKIVTGGSSDS---PSGYLGTETYDAADPGILVNIYSS-----SVDYE---VP 246

fusarium_oxysporum_3/1-252 201 YPQCFNLKIVTGGSSDS---PSGYLGTETYDVEDPGILVNIYSS-----SVDYE---VP 247

nectria_heamatococcuss_1/1-252 201 YPQCFNLKIVTGGSSSDN---PPGYLGTETYDANDPGILVNIYGN-----LPNYQ---VP 247

verticillium_albo_atrum_13/1-24 191 YPQCINLNVVTGSSSSAS---PSGVAGTSIYETDPGVLENIYTA-----TEYP---IP 236

verticillium_dahliae_4/1-241 191 YPQCINLNVVTGSSSSAS---PSGVAGTSIYETDPGVLENIYTA-----TEYP---IP 236

neurospora_tetrasperma_2/1-24 189 YPQCFNLKIVTGGSSSTV---PAGVAGTELYKATDAGILEFDIYKN-----DISYP---VP 235

TYPE3:NCU07760/1-240 189 YPQCFNLKIVTGGSSSTV---PAGVAGTELYKATDAGILEFDIYKN-----DISYP---VP 235

magna_porte_oryzae_16/1-243 192 YPQCFNLKIVTGGSSSTQ---PSGVAGTSIYETANDPGILFQLYQA-----PSTYR---VP 238

podospora_anseria_31/1-244 193 YPQCLNLRIVVGNNSNS---PAGVAGTSIYRANDAGILENPIYVA-----SPNYP---VP 239

hypocrea_orientalis_1/1-246 195 YPQCFNLAVVSGSSSLQ---PSGVKGTALYHSDDPGVLINIYTS-----PLAYT---IP 241

trichoderma_SP_SSL_1/1-246 195 YPQCFNLAVVSGSSSLQ---PSGVKGTALYHSDDPGVLINIYTS-----PLAYT---IP 241

Hypocrea_virens_3/1-246 195 YPQCFNLAVTGTGSSSLQ---PTGVLGTKLYQESDPGILENIYTS-----PLTYT---IP 241

trichoderma_atroviride_2/1-246 195 YPQCFNLAVTGTGSSSLQ---PSGVLATDLYHETDPGILENIYTS-----PLTYI---IP 241

hypocrea_rufa_1/1-246 195 YPQCFNLAVVSGSSSLQ---PSGVLGTDLYHATDPGVPIINIYTS-----PLNYI---IP 241

hypocrea_rufa_2/1-246 195 YPQCFNLAVVSGSSSLQ---PSGVLGTDLYHATDPGVPIINIYTS-----PLNYI---IP 241

trichoderma_saturisporum_1/1- 195 YPQCFNLAVVSGSSSLK---PSGVKGTALYHATDPGVPIINIYTS-----PLNYI---IP 241

aspergillus_kawachii_37/1-247 196 YPQCFNLVVTGCTAT---PSGVKGTETYATENGILVNIYST-----LTTYT---VP 242

aspergillus_tereus_6/1-245 195 YPQCFNLVVTGSSSQS---PAGVPATELYTSTDPGILVDIYNS-----LTYT---VP 240

neosartorya_fischeri_4/1-247 196 YPQCFNLVVTGSSSTAQ---PSGVKGTCLYSPDPGILVNIYNS-----LSTYI---VP 242

aspergillus_fumingatus_4/1-247 196 YPQCFNLVVTGSSSTAQ---PSGVKGTCLYSPDPGILVNIYNA-----LSTYI---VP 242

aspergillus_tereus_10/1-245 195 YPQCFNLVVTGSSSTVK---PSGVLTGALYSPDPGILVNIYNS-----LNYI---VP 240

chaetomium_globosum_5/1-220 197 YPQCFNLQSSSADHRA---RSATIGSA----- 220

TYPE3:NCU05969/1-243 192 YPQCFNLVVTGSSSTEK---PAGVKGTALYKPDAGISVNIYQS-----LSSYS---IP 238

2VTC/1-228 176 YPQCVNLVVTGSSSTKAL---PGTLPATQLYKPTDPGILENPIYT-----ITSYT---IP 223

aspergillus_fumingatus_1/1-245 194 YPQCINLNVVTGSSSDK---PAGTLGTALYKNTDAGILVNIYQS-----LSSYE---IP 240

neosartorya_fischeri_1/1-245 194 YPQCINLNVVTGSSSDK---PAGTLGTALYKNTDAGILVNIYQS-----LSSYD---IP 240

aspergillus_niger_1/1-245 194 YPQCINLNVVTGSSSTAT---PSGTLGTALYMDTPGIYDIWQS-----ISSYT---IP 240

aspergillus_kawachii_40/1-245 194 YPQCINLNVVTGSSSTAT---PSGTLGTALYKDTDPGIYDIWQS-----ISSYT---IP 240

aspergillus_tereus_5/1-232 194 YPQCINLNVVTGSSSTK---PSGVSATIFYKNTDPGIKFR----- 229

emmericella_nidulans_9/1-245 194 YPQCVNLVVTGSSSSAS---PSGVGTETYTPDPGILVNIYTS-----LDSYT---IP 240

penicillium_chrysogenum_2/1-245 194 YPQCLNLRVVTGSSSDV---PEGVGTETYKPDAGILVSIYNQ-----LKDYT---IP 240

aspergillus_niger_2/1-245 194 YPQCLNLRVVTGSSSSST---YSGTKGEALYKDTDPGILVNIYET-----LSSYD---IP 240

aspergillus_niger_12/1-244 194 YPQCLNLRVVTGSSSSST---YSGTKGEALYKDTDPGILVNIYET-----LSSYD---IP 240

aspergillus_kawachii_38/1-245 194 YPQCLNLRVVTGSSSSST---YSGTKGEALYKDTDPGILVNIYQS-----LSSYD---IP 240

zea_mys_1/1-245 194 YPQCLNLRVVTGSSSSST---YSGTKGEALYKDTDPGILVNIYET-----LSSYD---IP 240

aspergillus_clavatus_6/1-241 190 YPQCINLNVVTGSSSDK---PVGLTGKLYKATDPGILVNIYGS-----LTSYT---IP 236

aspergillus_tereus_8/1-241 190 YPQCMNLVVTGSSSDK---PAGTLGTALYKDTDPGILVNIYQT-----LSSYV---IP 236

aspergillus_oryzae_7/1-242 191 YPQCLNFRVVTGSSSDK---PEGTLGTALYKDTDPGILENIYQT-----LSSYT---IP 237

aspergillus_favus_5/1-242	191	YPCQLNFKVTGGSSDK---PEGTLGTALYKDTDPGCIQINIIYQT-----LTSYT---IP	237
glomerella_graminic_4/1-242	191	YPCQLNIEVVTGSSSEE---PAGYKGTALYTPKDACILVSVYNN-----LSKYQ---IP	237
aspergillus_fumingatus_3/1-238	186	YVTCQAQVKVVGSGGTGTP--GPTIKFPGGYKKDDPSFNFSIYNG-----YKDYF---MP	233
cholletotrichum_higginsianum_2	186	YNSCAQVKITGGNGTP--GPMIKFPGGYKKSDPSFNFSIYGG-----YKAYF---MP	233
glomerella_graminic_7/1-238	186	YNSCAQVKITGGNGTP--GPMIRFPGGYKKTDPSFNFSIYNG-----YKDYF---MP	233
aspergillus_clavatus_5/1-238	186	YVSCAQVKITVGGKGGK--GPMIKFPGGYKKTDPSFNFSIYNG-----YKDYF---MP	233
aspergillus_oryzae_5/1-238	186	YVSCAQVKVVGSGGTGTP--GPTIKFPGGYKKTDPSFTYSVWGG-----YKDYF---MP	233
aspergillus_favus_3/1-238	186	YVSCAQVKVVGSGGTGTP--GPTIKFPGGYKKTDPSFTYSVWGG-----YKDYF---MP	233
aspergillus_niger_9/1-238	186	YVSCAQVKVVGSGGTGTP--GPTIKFPGGYKKDDPSFNFSIYGG-----MKDYF---MP	233
emmericella_nidulans_6/1-238	186	YVSCAQVKVVGSGGTGTP--GPTIKFPGGYKKDDPSFNFSVWGG-----MKDYF---MP	233
aspergillus_clavatus_1/1-238	186	YNTCAQVKVVGSGGTGTP--GPTIKFPGGYKKNDPSFNFSIYQG-----YKDYF---MP	233
neosartorya_fischeri_7/1-238	186	YVTCQAQVKVVGSGGTGTP--GPTIKFPGGYKKDDPSFNFSIYNG-----YKDYF---MP	233
penicillium_chrysogenum_4/1-236	184	YVSCAQVKVVGSGGTGTP--GPTIKFPGGYKKDDPSFNFSIYNG-----YKDYF---MP	231
verticillium_albo_atrum_17/1-21	159	YVTCVQVKITGGNGTP--GPTIKFPGGYKKDDPSFNFSIYGG-----YKDYF---MP	206
verticillium_albo_atrum_17/1-2	159	YVTCVQVKITGGNGTP--GPTIKFPGGYKKDDSSFNFSIYGG-----YKDYF---MP	206
pyrenophora_teres_22/1-230	178	YMECFQLNIQSSSTGKL--GPTIKIPGLYSAQDPGIAYNKWVN-----PKSYV---VP	225
Phaeosphaeria_nodorum_4/1-230	178	YMECFQLNIQSSSTGKL--GPTAKIPGLYKATDPGIAYNFKWTN-----PKSYT---MP	225
pyrenophora_trici_repentis_23/	157	--ECFQLNIQSSSTGKL--GPTIKIPGLYSAQDPGIAYNKWVN-----PKSYV---VP	203
podospora_anseria_17/1-231	178	YITCAQRLRITGPGGNGP--SPLVIRIPGLYNANDPGIAYNKWTNN-----PAAYR---MP	226
glomerella_graminic_16/1-230	177	YMECAHLKITGSGGGTP--GPLVKKIPGLYKASDPGIAYNKWTNT-----PAQYI---MP	225
glomerella_graminic_31/1-230	177	YMECAHLKITGSGAGTP--GPLVKKIPGLYKASDPGIAYNKWTGN-----PAPYV---IP	225
chaetomium_globosum_15/1-229	176	YMECAHLKITGSGGGTP--GPLVKKIPGLYKASDPGIAYNKKWSN-----PAPYQ---MP	224
neosartorya_fischeri_2/1-235	182	YFTCAQLEVTGSSSGSP--SPVYKIPGVYKPEDENIHFNIIWYPT-----PTAYN---LP	230
aspergillus_tereus_12/1-235	182	YFTCAQLEVTGSSGTGTP--AEVAKIPGLYKPDANIHFNIYYPT-----PTAYD---LP	230
aspergillus_favus_7/1-235	182	YFTCAQLEVTGSSSGVP--GPLVKKIPGVYKPEDENIHFDIYYPV-----PTSVD---LP	230
aspergillus_fumingatus_6/1-235	182	YFTCAQLEVTGSSSGSP--SPTVKKIPGVYKPDENVHFNIIWYPT-----PTAYS---LP	230
4B5Q/1-217	160	YIGCAQLNVENGNGTP--GPLVSIPIGVYTGYPGILINIIYNL-----PKNETGYFAP	210
3EJA/1-208	153	YISCAQLSVTGGSTGEP--PNKVAFPGAYSATDPGILINIIYYPV-----PTSYSQ---NP	201
3EII/1-208	153	YISCAQLSVTGGSTGEP--PNKVAFPGAYSATDPGILINIIYYPV-----PTSYSQ---NP	201

serpula_lacrymans_5/1-229	225		229
schiztophyllum_communis_15/1-228	224	GPVAVV--	228
schiztophyllum_communis_16/1-228	224	GPVAVV--	228
chaetomium_globosum_8/1-223	219	GPVVF--	223
pyrenophora_trici_repentis_13/	216	GPPTF--	220
pyrenophora_teres_11/1-209	205	GPATF--	209
Phaeosphaeria_nodorum_18/1-21	214	GPDTF--	218
podospora_anseria_18/1-223	219	GPVVF--	223
thiavela_terestis_18/1-224	220	GPVVF--	224
myceliophthora_thermophilia_21	219	GPVVF--	223
TYPE1:NCU03328/1-229	225	GPSVF--	229
emmericella_nidulans_3/1-229	225	GPKVW--	229
aspergillus_tereus_4/1-228	224	GPVAVV--	228
podospora_anseria_11/1-231	227	GPAPV--	231
glomerella_graminic_6/1-230	226	GPAPF--	230
arthrobotrys_oligospora_11/1-1	185	GPKIF--	189
pyrenophora_trici_repentis_20/	224	GPVAVV--	228
Phaeosphaeria_nodorum_28/1-22	222	GPKVW--	226
myceliophthora_thermophilia_16	226	GPAPV--	230
thiavela_terestis_11/1-231	227	GPAPV--	231
chaetomium_globosum_24/1-226	222	GPVVF--	226
chaetomium_thermophilum_14/1-23	227	GPAPV--	231
TYPE1:NCU02344/1-232	228	GPAVA--	232
myceliophthora_thermophilia_2/	218	GPVVF--	222
sodaria_macrospora_4/1-217	213	GPATF--	217
neurospora_tetrasperma_12/1-21	214	GPVVF--	218
TYPE1:NCU00836/1-218	214	GPVVF--	218
thiavela_terestis_7/1-223	219	GPVVF--	223
podospora_anseria_5/1-221	217	GPKVF--	221
leptosphaeria_maculans_15/1-17	172	GPVPF--	176
glomerella_graminic_9/1-232	228	GPVKF--	232
glarea_lozoyensis_6/1-240	236	GPVPF--	240
TYPE2:NCU02240/1-235	231	GPVKF--	235
botryotinia_fuckeliana_2/1-234	230	GPVPF--	234
botryotinia_fuckeliana_12/1-24	236	GPVPF--	240
sclerotinia_sclerot_5/1-240	236	GPVPF--	240
Phaeosphaeria_nodorum_9/1-227	223	GPSVF--	227
chaetomium_thermophilum_18/1-2	231	GPVPF--	235
cholletotrichum_higginsianum_3	231	GPVPF--	235
podospora_anseria_30/1-234	230	GPSVF--	234
myceliophthora_thermophilia_10	231	GPSVF--	235
neurospora_crassa_1/1-236	232	GPSVF--	236
TYPE2:NCU01050/1-226	226	-----	226
neurospora_tetrasperma_1/1-236	232	GPSVF--	236
sodaria_macrospora_11/1-236	232	GPSVF--	236

Paravalsa_indica_8/1-210	206	GPSSV--	210
pyrenophora_trici_repentis_11/	223	GPAVY--	227
leptosphaeria_maculans_11/1-22	220	--ALY--	223
Phaeosphaeria_nodorum_14/1-22	223	GPAVY--	227
pyrenochaeta_lyocope_1/1-227	223	GPAVW--	227
pyrenophora_terestis_25/1-227	223	GPAVY--	227
glarea_lozoyensis_1/1-214	210	GPAVW--	214
myceliophthora_thermophilum_12	235	GPAVY--	239
chaetomium_thermophilum_7/1-24	236	GPPVY--	240
podospora_anseria_15/1-234	230	GPAVY--	234
thievela_terestis_10/1-235	231	GPAVY--	235
podospora_anseria_24/1-240	236	GPAVY--	240
pyrenophora_teres_17/1-233	229	GPAVI--	233
pyrenophora_trici_repentis_8/	229	GPAVI--	233
chaetomium_globosum_22/1-239	235	GPAVY--	239
thievela_terestis_17/1-240	236	GPTVY--	240
glomerella_graminic_32/1-232	228	GPAVY--	232
verticillium_dahliae_23/1-243	239	GPREFI--	243
verticillium_albo_atrum_15/1-21	210	-----	210
glomerella_graminic_17/1-244	240	GPREFI--	244
chaetomium_globosum_23/1-244	240	GPREFI--	244
podospora_anseria_29/1-244	240	GPAFI--	244
chaetomium_thermophilum_15/1-2	240	GPAFI--	244
sodaria_macrospora_16/1-245	241	GPAFI--	245
myceliophthora_thermophila_5/	240	GPAFI--	244
thievela_terestis_2/1-244	240	GPAFI--	244
Paravalsa_indica_13/1-241	237	GPAVI--	241
Paravalsa_indica_12/1-241	237	GPAVI--	241
myceliophthora_thermophila_6/	237	GPREFI--	241
chaetomium_globosum_31/1-241	237	GPAFI--	241
podospora_anseria_4/1-241	237	GPAFL--	241
sodaria_macrospora_2/1-240	236	GPPAV--	240
neurospora_tetrasperma_16/1-24	237	GPALF--	241
neurospora_tetrasperma_14/1-24	237	GPALF--	241
TYPE2:NCU02916/1-241	237	GPALF--	241
4EIR/1-223	217	GPSVFTC	223
pyrenophora_trici_repentis_22/	212	GPPVA--	216
verticillium_dahliae_24/1-222	218	GPASP--	222
verticillium_albo_atrum_16/1-21	213	GPAVW--	217
verticillium_dahliae_26/1-221	217	GPEVW--	221
3ZUD/1-228	222	GPLYTG	228
TYPE3:NCU07898/1-239	235	GPAVF--	239
2YET/1-228	222	GPLYTG	228
thermoascus_auranti_1/1-228	222	GPLYTG	228
4EIS/1-224	220	GPAVF--	224
giberella_zeae_7/1-251	247	GPTIC--	251
fusarium_oxysporum_3/1-252	248	GPTIV--	252
nectria_heamatococcuss_1/1-252	248	GPTIV--	252
verticillium_albo_atrum_13/1-24	237	GPLY--	241
verticillium_dahliae_4/1-241	237	GPLY--	241
neurospora_tetrasperma_2/1-24	236	GPSLI--	240
TYPE3:NCU07760/1-240	236	GPSLI--	240
magna_porte_oryzae_16/1-243	239	GPPMM--	243
podospora_anseria_31/1-244	240	GPALI--	244
hypocrea_orientalis_1/1-246	242	GPSVV--	246
trichoderma_SP_SSL_1/1-246	242	GPSVV--	246
Hypocrea_virens_3/1-246	242	GPTVV--	246
trichoderma_atroviride_2/1-246	242	GPTVV--	246
hypocrea_rufa_1/1-246	242	GPTVV--	246
hypocrea_rufa_2/1-246	242	GPTVV--	246
trichoderma_saturnusporum_1/1-	242	GPTVV--	246
aspergillus_kawachii_37/1-247	243	GPTAY--	247
aspergillus_tereus_6/1-245	241	GPSMI--	245
neosartorya_fischeri_4/1-247	243	GPTLI--	247
aspergillus_fumingatus_4/1-247	243	GPTLI--	247
aspergillus_tereus_10/1-245	241	GPTPI--	245
chaetomium_globosum_5/1-220	220	-----	220
TYPE3:NCU05969/1-243	239	GPALI--	243
2VTC/1-228	224	GPALW--	228
aspergillus_fumingatus_1/1-245	241	GPALY--	245
neosartorya_fischeri_1/1-245	241	GPALY--	245
aspergillus_niger_1/1-245	241	GPTLY--	245
aspergillus_kawachii_40/1-245	241	GPTLY--	245
aspergillus_tereus_5/1-232	229	--HLL--	232
emmericella_nidulans_9/1-245	241	GPALW--	245
penicillium_chrysogenum_2/1-245	241	GPALY--	245
aspergillus_niger_2/1-245	241	GPAMY--	245

aspergillus_niger_12/1-244	241	GPAT---	244
aspergillus_kawachii_38/1-245	241	GPAMY--	245
zea_mys_1/1-245	241	GPAMY--	245
aspergillus_clavatus_6/1-241	237	GPALW--	241
aspergillus_tereus_8/1-241	237	GPALY--	241
aspergillus_oryzae_7/1-242	238	GPALY--	242
aspergillus_favus_5/1-242	238	GPALY--	242
glomerrela_graminic_4/1-242	238	GPALP--	242
aspergillus_fumingatus_3/1-238	234	GPTVW--	238
cholletotrichum_higginsianum_2	234	GPAVW--	238
glomerrela_graminic_7/1-238	234	GPAVW--	238
aspergillus_clavatus_5/1-238	234	GPKVW--	238
aspergillus_oryzae_5/1-238	234	GPQVW--	238
aspergillus_favus_3/1-238	234	GPQVW--	238
aspergillus_niger_9/1-238	234	GPAVW--	238
emmericella_nidulans_6/1-238	234	GPAVY--	238
aspergillus_clavatus_1/1-238	234	GPAVW--	238
neosartorya_fischeri_7/1-238	234	GPAVW--	238
penicillium_chrysogenum_4/1-236	232	GPEVW--	236
verticillium_albo_atrum_17/1-21	207	GPAVW--	211
verticillium_albo_atrum_17/1-2	207	GPAVW--	211
pyrenophora_teres_22/1-230	226	GPALW--	230
Phaeosphaeria_nodorum_4/1-230	226	GPAKY--	230
pyrenophora_trici_repentis_23/	204	GPPVW--	208
podospora_anseria_17/1-231	227	GPAVW--	231
glomerrela_graminic_16/1-230	226	GPKVW--	230
glomerrela_graminic_31/1-230	226	GPAVW--	230
chaetomium_globosum_15/1-229	225	GPAVW--	229
neosartorya_fischeri_2/1-235	231	GPSVW--	235
aspergillus_tereus_12/1-235	231	GPSVW--	235
aspergillus_favus_7/1-235	231	GPSVW--	235
aspergillus_fumingatus_6/1-235	231	GPSVW--	235
4B5Q/1-217	211	GPAVWQG	217
3EJA/1-208	202	GPAVFSC	208
3EII/1-208	202	GPAVFSC	208