

$$\begin{array}{ccc} \eta^1 & & \alpha^1 \\ \text{---} \text{---} \text{---} & & \text{---} \text{---} \text{---} \\ 10 & 20 & \end{array}$$

	WPH.WRGTRLPR				SLLSLQ				PST.LRV
	WPH.WRGTRLPR				SLLSLQ				PST.SRV
	WPH.WRGTRLPR				SLLSLQ				PST.SRV
	WPH.WRGTRLPR				SLLSLQ				PSH.SRV
	WPH.WRGTRLPR				SLLSLQ				PSA.SRV
	WPH.WRGTRLPR				SLLSLQ				PSA.SRV
	WPH.WRGTRLPR				SLLKLQ				PSP.SRV
	LLS								
	WRH.WRSSRLRA				SLLNL	R			SSP.SRV
	WRH.WRSSRLRV				SLPNL	R			SSP.SRV
	WLL.HRGPRLSR				PPPNL				SSS.HQL
	WLLHHRGPRLSR				PLPNL	R			SIPWHF
	WLLHYRGPRLSR				LPPPNL	R			PS.HHF
	WLLHYRGPRLSR				LPPPNL	R			PS.HHF
	WHT.YRGPRLSR				SLPNL	R			PSASYRF
	WPR.HHGPRLSR				SLPNL	R			RSR.ART
	WPR.HHGPRLSR				SLPNL	R			RSR.ART
	WPR.HHGPRLSR				SLLNL	R			PSRPRRA
	WPR.QYGRLTR				SPPTL	R			RSR.ARP
	CSPRAPAVSIHR.AAAAAARQ			SCRRPSC	R				PLL.V.RA
									TRA
VGNSLAS	VHLRIPCKAICQ			RRMHSKTTLLRSAC	R				RPT.HRA
	WAPPHNILTLAG			LRPQCR.HLPRPSC	R				RRS
	WLPRYSTSTLAG			RQPQCO.HLPHLSC					RR
	WLPRCNTPILAG			RRPRRQ.HLPRPSC	R				RRS
	IPWLTRYYSPPSLAAGRLRH			STPAC	R				LRH.GRT
	IPWLTRYYSPPSLAAGRLRH			STPAC	R				LRH.GRT
				KCIIGSCLFARL	PCASWP				SLSN.NRP
	SAPLRRALILAS			PRPSSL			IQW		LSIG.SRG
	SAPLRRALILAS			PRPSSS			IQW		LPIG.SRG
	SAPLRRALILAS			PRPSSS			TQW		LPIG.SRG
	SAPLRRALILAS			PRPSSS			IQW		LPIG.SRG
	SAPLRRALILAS			PRPSSS			TQW		LSIG.SRG
	SALLRRALILAS			PRPSSS			IQW		LPIV.SRG
	SALLRRALTLAS			PRLSSS			TQW		LPIV.SRG
	STLWRRTPVLAL			KNPPC			AQW		HPIP.RQA
	STLWRRTPVLAL			KNPPC			AQW		HPIP.RQA
	SIIWRRAPTSAL			TKEPC	R		AQW		SPIA.RRS
	STIWRKAPAFPL			ARHTC	R		VQW		HHVP.RRN
	STIWRKAPAFPL			ARHTC	R		VQW		HHVP.RRN
	STIWRKAPAFPL			ARHTC	R		AQW		HHVP.RRN
	SKIWRKAPAFPR			ARHTC	H		AQW		HPVP.RRN
	LIIWWRKAPAPPL			ARHSC	R		AQW		HTVS.RRN
	SAIWRNAPASPL			FRQLY	R		AQC		HRS
	SAIWRNAPASPL			FRQLY	R		AQC		HRS
	SVIWRNAPDLLL			SRQLY	R		AQW		HRS
	SVIWRNAPDLLL			SRQLY	R		AQW		HRS
	SVIWRNAPDLLL			SRQLY	R		AQW		HRS
	SVIWRNAPDLLL			SRQLY	R		AQW		HRS
	SVIWRNAPDLLL			SRQLY	R		AQW		HRS
	SVIWRNAPDLLL			SRQLY	R		AQW		HRS
	SVIWRNAPTLP			SQQLY	R		AQC		HKK
	SVIWRNAPTLP			SQQLY	R		AQC		HKK
	MWRSAPALPL			SRQLYG			ARC		HRS
	SVIWRSAPALPL			SRQLYG			AQC		HRS
	SVIWRSAPALPL			SRQLYG			VQC		HRS
	SVIWRSAPALPL			SRQLYG			AQC		HRS
	SAIWRNAPASPL			SRQLY	R		AQC		HRS
	SAIWRNAPASPL			SRQLY	R		AQC		HRS
	SAIWRNAPASPL			SRQLY	R		AQC		HRS
	SAIWRNAPASPL			SRQLY	R		AQC		HRS
	SIIRRNAPTSPL			SRQLY	R		AQC		HRS
	SRTWRKAPASAL			GRLLY	H		AQWH		HPVS.RRT
	STIWRKAPALS			IKYPY	R		KQP		FLLQ.CRG
	STIWRKAPALGL			VRYPY	H		KQP		FLLQ.CRS
	STIWRKAPAPTL			VKYSY	R		KQP		FITQ.CRS
	STIWRNAPASTL			VRYTY	R				

[Trichoderma harzianum]_ThaL
[Trichoderma harzianum]_KKO99473.1
[Trichoderma guizhouense]_OPB43634.1
[Trichoderma simmonsii]_QYS94233.1
[Trichoderma harzianum CBS_226.95]_XP_024777038.1
[Trichoderma harzianum]_PKK42226.1
[Trichoderma lentiforme]_KAF3077685.1
[Trichoderma harzianum]_PNP59423.1
[Trichoderma virens FT-333]_UKZ73321.1
[Trichoderma virens Gv29-8]_XP_013960763.1
[Trichoderma asperellum CBS_433.97]_XP_024756506.1
[Trichoderma atroviride IMI_206040]_XP_013943551.1
[Trichoderma gamsii]_PNP38305.1
[Trichoderma gamsii]_XP_018663207.1
[Trichoderma arundinaceum]_REFU75476.1
[Trichoderma gracile]_KAH0498535.1
[Trichoderma reesei QM6a]_XP_006968245.1
[Trichoderma citrinoviride]_XP_024753310.1
[Trichoderma longibrachiatum ATCC_18648]_PTB78011
[Hirsutella minnesotensis 3608]_KJZ78693.1
[Hirsutella rhossiliensis]_XP_044725020.1
[Ophiocordyceps sinensis C018]_EQK99704.1
[Tolypocladium capitatum]_PNY29418.1
[Tolypocladium ophioglossoides CBS_100239]_KND888
[Tolypocladium paradoxum]_POR38551.1
[Drechmeria coniospora]_ODA83100.1
[Drechmeria coniospora]_XP_040657415.1
[Ophiocordyceps unilateralis]_PFH57814.1
[Fusarium sp. AF-6]_RSL54391.1
[Fusarium kuroshium]_RMJ16314.1
[Fusarium sp. AF-8]_RSL70798.1
[Fusarium ambrosium]_RSM11997.1
[Fusarium floridanum]_RSL80024.1
[Fusarium vanettenii 77-13-4]_XP_003050716.1
[Fusarium solani]_XP_046134414.1
[Fusarium albosuccineum]_KAF4468415.1
[Fusarium decemcellulare]_KAF5011412.1
[Fusarium sarcochromum]_KAF4964785.1
[Fusarium avenaceum]_KAH6968652.1
[Fusarium avenaceum]_KIL96274.1
[Fusarium avenaceum]_KAG5656265.1
[Fusarium tricinctum]_KAH7262197.1
[Fusarium heterosporum]_KAF5663380.1
[Fusarium sp. MPI-SDFR-AT-0072]_KAH7164412.1
[Fusarium oxysporum f. sp. rapae]_KAG7414252.1
[Fusarium mangiferae]_XP_041681833.1
[Fusarium proliferatum]_CVL11341.1
[Fusarium proliferatum FT1]_XP_031083673.1
[Fusarium fujikuroi]_SCN78580.1
[Fusarium fujikuroi IMI_58289]_XP_023430709.1
[Fusarium sp. NRRL_25303]_KAF5626228.1
[Fusarium xylarioides]_KAG5746670.1
[Fusarium xylarioides]_KAG5788219.1
[Fusarium pseudocircinatum]_KAF5575212.1
[Fusarium pseudoanthophilum]_KAF5575021.1
[Fusarium verticillioides]_RBQ71412.1
[Fusarium verticillioides 7600]_XP_018746479.1
[Fusarium oxysporum NRRL_32931]_XP_031039788.1
[Fusarium oxysporum f. sp. lycopersici 4287]_XP_0
[Fusarium oxysporum f. sp. cepae]_RKK20771.1
[Fusarium redolens]_XP_046051341.1
[Fusarium austroafricanum]_KAF4458007.1
[Fusarium flagelliforme]_XP_045986929.1
[Fusarium sp. FIESC RH6]_KAI1056250.1
[Fusarium sporotrichioides]_RGP72309.1
[Fusarium poae]_XP_044713592.1
[Fusarium venenatum]_XP_025590637.1
[Fusarium pseudograminearum]_KAF0641638.1
[Fusarium graminearum]_CAG1993854.1
[Fusarium graminearum]_PCD31638.1
[Fusarium graminearum]_CZS78629.1
[Fusarium graminearum]_CAF3606094.1
[Fusarium graminearum PH-1]_XP_011318944.1
[Fusarium culmorum]_QPC68571.1
[Fusarium pseudograminearum]_QPC77441.1
[Fusarium longipes]_RGP79158.1
[Ilyonectria destructans]_KAH7011941.1
[Ilyonectria sp. MPI-CAGE-AT-0026]_KAH6985660.1
[Ilyonectria robusta]_XP_046104990.1
[Dactylonectria estremocensis]_KAH7149692.1
[Dactylonectria macrodidyma]_KAH7148923.1
[Thelonectria olida]_KAH6899778.1
[Stachybotrys chartarum IBT_7711]_KEY69997.1
[Stachybotrys chartarum IBT_40293]_KFA50745.1
[Stachybotrys chlorohalonata IBT_40285]_KFA62815.1
[Purpureocillium lilacinum]_XP_018174914.1
[Clonostachys solani]_CAH0059244.1
[Clonostachys rosea]_VUC36940.1
[Clonostachys rhizophaga]_CAH0026503.1
[Emericellopsis atlantica]_XP_046114137.1
[Acremonium chrysogenum ATCC_11550]_KFH46845.1
[Pochonia chlamydosporia 170]_XP_018148143.1
[Epichloe festucae F11]_QPG98063.1
[Colletotrichum incanum]_KZL82863.1
[Colletotrichum simmonsii]_KXH39849.1
[Colletotrichum sojae]_KAF6819546.1

[illegible]

[<i>Trichoderma harzianum</i>] <i>ThaL</i>	β1										α2										η2										β2										α1																	
	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500													
[<i>Trichoderma harzianum</i>] <i>ThaL</i>	P	K	Y	P	I	V	L	A	H	G	L	F	G	F	S	E	L	R	V	S	P	.	L	I	P	T	E	Y	W	N	G	I	K	Q	A	L	T	A	.	N	N	C	T	.	V	I	T	A	T	V	P	P	S	G	S	T	E	E
[<i>Trichoderma harzianum</i>] <i>KKO99473.1</i>	P	K	Y	P	I	V	L	A	H	G	L	F	G	F	S	E	L	R	V	S	P	.	L	I	P	T	E	Y	W	N	G	I	K	Q	A	L	T	A	.	N	N	C	T	.	V	I	T	A	T	V	P	P	S	G	S	T	E	E
[<i>Trichoderma guizhouense</i>] <i>OPB43634.1</i>	P	K	Y	P	I	V	L	A	H	G	L	F	G	F	S	E	L	R	V	S	P	.	L	I	P	T	E	Y	W	N	G	I	K	Q	A	L	T	A	.	N	N	C	T	.	V	I	T	A	T	V	P	P	S	G	S	T	E	E
[<i>Trichoderma simmonsii</i>] <i>QY954233.1</i>	P	K	Y	P	I	V	L	A	H	G	L	F	G	F	S	E	L	R	V	S	P	.	L	I	P	T	E	Y	W	N	G	I	K	Q	A	L	T	A	.	N	N	C	T	.	V	I	T	A	T	V	P	P	S	G	S	T	E	E
[<i>Trichoderma harzianum</i>] <i>CBS 226.95</i> <i>XP_024777038.1</i>	P	K	Y	P	I	V	L	A	H	G	L	F	G	F	S	E	L	R	V	S	P	.	L	I	P	T	E	Y	W	N	G	I	K	Q	A	L	T	A	.	N	N	C	T	.	V	I	T	A	T	V	P	P	S	G	S	T	E	E
[<i>Trichoderma harzianum</i>] <i>PKK42226.1</i>	P	K	Y	P	I	V	L	A	H	G	L	F	G	F	S	E	L	R	V	S	P	.	L	I	P	T	E	Y	W	N	G	I	K	Q	A	L	T	A	.	N	N	C	T	.	V	I	T	A	T	V	P	P	S	G	S	T	E	E
[<i>Trichoderma lentiforme</i>] <i>KAF3077685.1</i>	P	K	Y	P	I	V	L	A	H	G	L	F	G	F	S	E	L	R	V	S	P	.	L	I	P	T	E	Y	W	N	G	I	K	Q	A	L	T	A	.	N	N	C	T	.	V	I	T	A	T	V	P	P	S	G	S	T	E	E
[<i>Trichoderma harzianum</i>] <i>PNP59423.1</i>	P	T	Y	P	I	V	L	A	H	G	L	F	G	F	S	E	L	R	V	S	P	.	L	I	P	T	E	Y	W	N	G	I	K	Q	A	L	T	A	.	N	N	C	T	.	V	I	T	A	T	V	P	P	S	G	S	T	E	E
[<i>Trichoderma virens</i>] <i>FT-333</i> <i>UK273321.1</i>	P	K	Y	P	I	V	L	A	H	G	L	F	G	F	S	E	L	R	V	S	P	.	L	I	P	T	E	Y	W	N	G	I	K	Q	A	L	T	A	.	N	N	C	T	.	V	I	T	A	T	V	P	P	S	G	S	T	E	E
[<i>Trichoderma virens</i>] <i>Gv29-8</i> <i>XP_013960763.1</i>	P	K	Y	P	I	V	L	A	H	G	L	F	G	F	S	E	L	R	V	S	P	.	L	I	P	T	E	Y	W	N	G	I	K	Q</																								

	$\alpha 3$		$\eta 3$	
[Trichoderma harzianum]_ThaL	0000000	TT	2.....22	-
	120	130	140	
[Trichoderma harzianum]_ThaL	RAAKKLAADTLAQT	TTA...ASLPSA	.....QDADGHATT	FP
[Trichoderma harzianum]_KKO99473.1	RAAKKLAADTLAQT	TTA...ASLPSA	.....QDADGHATT	FP
[Trichoderma guizhouense]_OPB43634.1	RAAKKLAADTLAQT	TTA...ASLPSA	.....QDG.....	FP
[Trichoderma simmonsii]_QYS94233.1	RAAKKLAADTLAQT	TTA...ASLPDS	.....QDADG.....	FP
[Trichoderma harzianum]_CBS 226.95]_XP_024777038.1	RAAKKLAADTLAQT	TTA...ASLPSA	.....QDAEGHA.....	FP
[Trichoderma harzianum]_PKK42226.1	RAAKKLAADTLAQT	TTA...ASLPSA	.....QDAEGHA.....	FP
[Trichoderma lentiforme]_KAF3077685.1	RAAKKLAADTLAQT	TTA...ASLPSA	.....QDADGHATT	FP
[Trichoderma harzianum]_PNP59423.1	RAAKKLAADTLAQT	TTA...ASLPS	.....ADGHA.....	TP
[Trichoderma virens]_FT-333]_UKZ73321.1	RAAKKLAADTLAQT	TTA...SSLSA	.....HDGK.....	FP
[Trichoderma virens]_Gv29-8]_XP_013960763.1	RAAKKLAADTLAQT	TTA...SSLSA	.....HDGQ.....	FP
[Trichoderma asperellum]_CBS 433.97]_XP_024756506.	RAAKKLAADTLAQT	STST.....H.....	.....KEHA.....	APT
[Trichoderma atroviride]_IMI 206040]_XP_013943551.	RAAKKLAADTLAQT	STSR.....D.....	.....ERDA.....	FT
[Trichoderma gamsii]_PNP38305.1	RAAKKLAADTLAQT	STSR.....D.....	.....KHE.....	FT
[Trichoderma gamsii]_XP_018663207.1	RAAKKLAADTLAQT	STSR.....D.....	.....KHE.....	FT
[Trichoderma arundinaceum]_RFU75476.1	RAAKKLAADTLAQT	STSR.....D.....	.....RNGQ.....	APT
[Trichoderma gracile]_KAH0498535.1	RAEKLAADTLAQT	STSA...AAAPSLIDS	.....DHNNNNNRALRHNGGQNGQE	TP
[Trichoderma reesei]_QM6a]_XP_006968245.1	RAEKLAADTLAQT	STSA...STCHS	.....NNNNNNNNKNTNDRDSRL	TP
[Trichoderma citrinoviride]_XP_024753310.1	RAEKLAADTLAQN	QNS.....	.....	TP
[Trichoderma longibrachiatum]_ATCC 18648]_PTB78011	RAEKLAADTLAQT	SL.....S.....	.....NRDDKKLVDRDGGRGQGEANS	SP
[Hirsutella minnesotensis]_3608]_KJZ78693.1	RAAKKLAQDIAAC	PCPQASSSGP	.....GAGNG	FVP
[Hirsutella rhossiliensis]_XP_044725020.1	RAAKKLAADIAAF	FP...SSPAP	.....RTGEG	TV
[Ophiocordyceps sinensis]_CO18]_EQK99704.1	RAAKKLAADMAA	ALSS...S...P	.....RAAQG	IS
[Tolypocladium capitatum]_PNY29418.1	RAAKKLAADIAAD	TSAS...SDPSP	.....SPGRP	TP
[Tolypocladium ophioglossoides]_CBS 100239]_KND888	RAAKKLAADIAA	ASAF...DPSP	.....SPSR	TP
[Tolypocladium paradoxum]_POR38551.1	RAAKKLAADIAA	ASSS...GT.....	.....	TP
[Drechmeria coniospora]_ODA83100.1	RAAKKLAADISA	SIAS...SKFSG	.....	D
[Drechmeria coniospora]_XP_040657415.1	RAAKKLAADISA	SIAS...SKFSG	.....	D
[Ophiocordyceps unilateralis]_PFH57814.1	RAAKKLAADTAT	ARS.....	.....	P
[Fusarium sp.]_AF-6]_RSL54391.1	RAAALRSALAE	AHAPA	.....	PA
[Fusarium kuroshium]_RMJ16314.1	RAAALRSALAE	AHAPA	.....	PA
[Fusarium sp.]_AF-8]_RSL70798.1	RAAALRSALAE	AHAPA	.....	PA
[Fusarium ambrosium]_RSM11997.1	RAAALRSALAE	AHAPA	.....	PA
[Fusarium floridanum]_RSL80024.1	RAAALRSALAE	AHAPA	.....	PA
[Fusarium vanettenii]_77-13-4]_XP_003050716.1	RAAALRSALAE	AHAPA	.....	PA
[Fusarium solani]_XP_046134414.1	RAAALRSALAE	AHAPA	.....	PA
[Fusarium albosuccineum]_KAF4468415.1	RAAALRTALAE	SHAPA	.....	PA
[Fusarium decemcellulare]_KAF5011412.1	RAAALRTALAE	SHAPA	.....	PA
[Fusarium sarcochroum]_KAF4964785.1	RAAALRSALAE	AHAPA	.....	PA
[Fusarium avenaceum]_KAH6968652.1	RAAALRSALAE	AQSPA	.....	PA
[Fusarium avenaceum]_KIL96274.1	RAAALRSALAE	AQSPA	.....	PA
[Fusarium avenaceum]_KAG5656265.1	RAAALRSALAE	AQSPA	.....	PA
[Fusarium tricinatum]_KAH7262197.1	RAAALRSALAE	AQSPA	.....	PA
[Fusarium heterosporum]_KAF5663380.1	RAAALRSALAE	AHTPA	.....	LE
[Fusarium sp.]_MPI-SDFR-AT-0072]_KAH7164412.1	RAAALRSALAE	AHAPM	.....	HE
[Fusarium oxysporum]_f. sp. rapae]_KAG7414252.1	RAAALRSALAE	AHAPM	.....	HE
[Fusarium mangiferae]_XP_041681833.1	RATALRSALAE	AHAPM	.....	PE
[Fusarium proliferatum]_CVL11341.1	RATALRSALAE	AHAPM	.....	PE
[Fusarium proliferatum]_ET1]_XP_031083673.1	RATALRSALAE	AHAPM	.....	PE
[Fusarium fujikuroi]_SCN78580.1	RATALRSALAE	AHAPM	.....	PE
[Fusarium fujikuroi]_IMI 58289]_XP_023430709.1	RATALRSALAE	AHAPM	.....	PE
[Fusarium sp.]_NRRL 25303]_KAF5626228.1	RATALRSALAE	AHAPM	.....	PE
[Fusarium xylarioides]_KAG5746670.1	RATALRSALAE	AHAPM	.....	PE
[Fusarium xylarioides]_KAG5788219.1	RATALRSALAE	AHAPM	.....	PE
[Fusarium pseudocircinatum]_KAF5575212.1	RATALRSALAE	AHAPM	.....	PE
[Fusarium pseudoanthophilum]_KAF5575021.1	RATALRSALAE	AHAPM	.....	PE
[Fusarium verticillioides]_RBQ71412.1	RATALRSALAE	AHAPM	.....	PE
[Fusarium verticillioides]_7600]_XP_018746479.1	RATALRSALAE	AHAPM	.....	PE
[Fusarium oxysporum]_NRRL 32931]_XP_031039788.1	RATALRSALAE	ALAPM	.....	Q
[Fusarium oxysporum]_f. sp. lycopersici 4287]_XP_0	RATALRSALAE	ALAPM	.....	Q
[Fusarium oxysporum]_f. sp. cepae]_RKK20771.1	RATALRSALAE	ALAPM	.....	Q
[Fusarium redolens]_XP_046051341.1	RAAALRSALAE	AHAPM	.....	PE
[Fusarium austroafricanum]_KAF4458007.1	RAAALRSALAE	AYAPM	.....	PE
[Fusarium flagelliforme]_XP_045986929.1	RAAALRSALAE	AHAPA	.....	PE
[Fusarium sp.]_FIESC RH6]_KAT1056250.1	RAAALRSALAE	AHAPA	.....	PE
[Fusarium sporotrichioides]_RGP72309.1	RAAALRSALAE	AHAPA	.....	PE
[Fusarium poae]_XP_044713592.1	RAAALRSALAE	AHAPV	.....	PE
[Fusarium venenatum]_XP_025590637.1	RAAALRSALAE	AHAPV	.....	PE
[Fusarium pseudograminearum]_KAF0641638.1	RAAALRSALAE	AHAPA	.....	PE
[Fusarium graminearum]_CAG1993854.1	RAAALRSALAE	AHAPA	.....	PE
[Fusarium graminearum]_PCD31638.1	RAAALRSALAE	AHAPA	.....	PE
[Fusarium graminearum]_CZS78629.1	RAAALRSALAE	AHAPA	.....	PE
[Fusarium graminearum]_CAF3606094.1	RAAALRSALAE	AHAPA	.....	PE
[Fusarium graminearum]_PH-1]_XP_011318944.1	RAAALRSALAE	AHAPA	.....	PE
[Fusarium culmorum]_QPC68571.1	RAAALRSALAE	AHAPA	.....	PE
[Fusarium pseudograminearum]_QPC77441.1	RAAALRSALAE	AHAPA	.....	PE
[Fusarium longipes]_RGP79158.1	RAAALRSALAE	AHAPV	.....	PE
[Ilyonectria destructans]_KAH7011941.1	RAAALHAAIAE	CAPA	.....	PD
[Ilyonectria sp.]_MPI-CAGE-AT-0026]_KAH6985660.1	RAAALHAAIAE	CAPA	.....	PD
[Ilyonectria robusta]_XP_046104990.1	RAAALHAAIAE	CAPA	.....	PD
[Dactylonectria estremocensis]_KAH7149692.1	RAAALHAAIAE	CDPK	.....	PE
[Dactylonectria macrodidyma]_KAH7148923.1	RAAALHAAIAE	CEPK	.....	PE
[Thelonectria olida]_KAH6899778.1	RAAALHDAIAE	CSPM	.....	PE
[Stachybotrys chartarum]_IBT 7711]_KEY69997.1	RAAKKLGAIAA	QAPP	.....	NV
[Stachybotrys chartarum]_IBT 40293]_KFA50745.1	RAAKKLGAIAA	QAPP	.....	NV
[Stachybotrys chlorohalonata]_IBT 40285]_KFA62815.	RAAKKLGAIAA	QAPP	.....	NV
[Purpureocillium lilacinum]_XP_018174914.1	RAAKKLAVEISS	ALLSS...SSSSSSVASSSPFPASRGSSG.AADVARGDDDT	.....	RT
[Clonostachys solani]_CAH0059244.1	RAASLRDQIAA	AR.....	.....	FS
[Clonostachys rosea]_VUC36940.1	RAASLRDHITA	AR.....	.....	FS
[Clonostachys rhizophaga]_CAH0026503.1	RAASLRDQIAA	AR.....	.....	FS
[Emericellopsis atlantica]_XP_046114137.1	RAAKKLREDIDA	AAAST...TR.....	.....	DGR
[Acremonium chrysogenum]_ATCC 11550]_KFH46845.1	RAAKKLRDDIDA	ASTRT...TDGSR	.....	AEK
[Pochonia chlamydosporia]_170]_XP_018148143.1	RAAKKLADDITS	AGVD...V.....	.....	SAG
[Epichloe festucae]_F11]_QPG98063.1	RAAKKLADEIAA	ARHSG	.....	P
[Colletotrichum incanum]_KZ182863.1	RAAKKLGAIAA	KAG	.....	GRA
[Colletotrichum simmondsii]_KXH39849.1	RAAKKLGAIAA	KAG	.....	GRA
[Colletotrichum sojiae]_KAF6819546.1	RAAKKLGAIAA	KAR	.....	GRS

[Trichoderma_harzianum]_ThaL	β3	α4	T . . . T	β4	TT	α5	
	150	160	170	180	190	200	
[Trichoderma_harzianum]_ThaL	NIIAHS	MGGGLD	ARYMISLLRP	...SGIRIAS	LVTIATPHRGS	FADYLVLR..GAG..PL	
[Trichoderma_harzianum]_KKO99473.1	NIIAHS	MGGGLD	ARYMISLLRP	...SGIRIAS	LVTIATPHRGS	FADYLVLR..GAG..PL	
[Trichoderma_guizhouense]_OPB43634.1	NIIAHS	MGGGLD	ARYMISLLRP	...SGIRIAS	LVTIATPHRGS	FADYLVLR..GAG..PL	
[Trichoderma_simmonsii]_QYS94233.1	NIIAHS	MGGGLD	ARYMISLLRP	...SGIRIAS	LVTIATPHRGS	FADYLVLR..GAG..PL	
[Trichoderma_harzianum_CBS_226.95]_XP_024777038.1	NIIAHS	MGGGLD	ARYMISLLRP	...SGIQIAS	LVTIATPHRGS	FADYLVLR..GAG..PL	
[Trichoderma_harzianum]_PKK42226.1	NIIAHS	MGGGLD	ARYMISLLRP	...SGIQIAS	LVTIATPHRGS	FADYLVLR..GAG..PL	
[Trichoderma_lentiforme]_KAF3077685.1	NIIAHS	MGGGLD	ARYMISLLRP	...SGIRIAS	LVTIATPHRGS	FADYLVLR..GAG..PL	
[Trichoderma_harzianum]_PNP59423.1	NIIAHS	MGGGLD	ARYMISLLRP	...SGIRIAS	LVTIATPHRGS	FADYLVLR..GAG..PL	
[Trichoderma_virens_FT-333]_UKZ73321.1	NIIAHS	MGGGLD	ARYMISLLRP	...SGIRIAS	LVTIATPHRGS	FADYLVLR..GAG..PL	
[Trichoderma_virens_Gv29-8]_XP_013960763.1	NIIAHS	MGGGLD	ARYMISLLRP	...SGIRIAS	LVTIATPHRGS	FADYLVLR..GAG..PL	
[Trichoderma_asperellum_CBS_433.97]_XP_024756506.1	NIIAHS	MGGGLD	ARYMISRLKPA	..LANVRVA	LVTIATPHRGS	FADYLVLR..GAG..PI	
[Trichoderma_atroviride_IMI_206040]_XP_013943551.1	NIIAHS	MGGGLD	ARYMISRLKPV	..LKNVRVA	LVTIATPHRGS	FADYLVLR..GAG..PI	
[Trichoderma_gamsii]_PNP38305.1	NIIAHS	MGGGLD	ARYMISRLKPV	..LQNVRVA	LVTIATPHRGS	FADYLVLR..GAG..PI	
[Trichoderma_gamsii]_XP_018663207.1	NIIAHS	MGGGLD	ARYMISRLKPV	..LQNVRVA	LVTIATPHRGS	FADYLVLR..GAG..PI	
[Trichoderma_arundinaceum]_RFU75476.1	NIIAHS	MGGGLD	ARYMISRLQP	...LNINIAS	LVTIATPHRGS	FADYLVLR..GAG..PI	
[Trichoderma_gracile]_KAH0498535.1	NIIAHS	MGGGLD	ARYMISRLRP	...RGIRVA	LVTIATPHRGS	FADYLVDS..DAGS..PL	
[Trichoderma_reesei_QM6a]_XP_006968245.1	NIIAHS	MGGGLD	ARYMISRLRP	...RGIKVA	LVTIATPHRGS	FADYLVDS..DAGS..PL	
[Trichoderma_citrinoviride]_XP_024753310.1	NIIAHS	MGGGLD	ARYMISRLRP	...AGIKVA	LVTIATPHRGS	FADYLVDS..DSS..PV	
[Trichoderma_longibrachiatum_ATCC_18648]_PTB78011	NIIAHS	MGGGLD	ARYMISRLRP	...RGIKVA	LVTIATPHRGS	FADYLVDS..DTS..PL	
[Hirsutella_minnesotensis_3608]_KJZ78693.1	NIIAHS	MGGGLD	ARYMISHLQP	...GKVA	LVTIATPHRGS	FADYLVLEK..GAG..PI	
[Hirsutella_rhoosiliensis]_XP_044725020.1	NIIAHS	MGGGLD	ARYLISHLQP	Q..GROVTVA	LVTIATPHRGS	FADYLVFDK..GAG..PI	
[Ophiocordyceps_sinensis_CO18]_EQK99704.1	NIIAHS	MGGGLD	ARYLISHLQPK	..GQPTVAS	LVTIATPHRGS	FADYLVLE..GAG..PF	
[Tolypocladium_capitatum]_PNY29418.1	NIIAHS	MGGGLD	ARYMISHLLRA	..TPNVRIAS	LTISTPHRGS	FADYLVLEE..GAG..PI	
[Tolypocladium_ophioglossoides_CBS_100239]_KND888	NIIAHS	MGGGLD	ARYMISHLLRA	..TPNVRIAS	LTISTPHRGS	FADYLVLEK..GAG..PI	
[Tolypocladium_paradoxum]_POR38551.1	NIIAHS	MGGGLD	ARYMVSHLLRA	..TPDVRVA	LTISTPHRGS	FADYLVLE..GAG..PM	
[Drechmeria_coniospora]_ODA83100.1	NIIAHS	MGGGLD	ARYMISRLQRA	..NSNFRVA	LVTIATPHRGS	FADYLVLE..SAG..PL	
[Drechmeria_coniospora]_XP_040657415.1	NIIAHS	MGGGLD	ARYMISRLQRA	..NSNFRVA	LVTIATPHRGS	FADYLVLE..SAG..PL	
[Ophiocordyceps_unilateralis]_PFH57814.1	NVIAHS	MGGGLD	ARYMISRLPH	...RRAVAS	LTISTPHRGS	FADYVLLAA..G..G..PL	
[Fusarium_sp._AF-6]_RSL54391.1	TIIAHS	MGGGLD	ARYMLAHLKP	...LPVRVA	LVTIATPHRGS	FADYLVLE..QVS..PL	
[Fusarium_kuroshium]_RMJ16314.1	TIIAHS	MGGGLD	ARYMLAHLKP	...LPVRVA	LVTIATPHRGS	FADYLVLE..QVS..PL	
[Fusarium_sp._AF-8]_RSI70798.1	TIIAHS	MGGGLD	ARYMLAHLKP	...LPVRVA	LVTIATPHRGS	FADYLVLE..QVS..PL	
[Fusarium_ambrosium]_RSM11997.1	TIIAHS	MGGGLD	ARYMLAHLKP	...LPVRVA	LVTIATPHRGS	FADYLVLE..QVS..PL	
[Fusarium_floridanum]_RSL80024.1	TIIAHS	MGGGLD	ARYMLAHLKP	...LPVRVA	LVTIATPHRGS	FADYLVLE..QVS..PL	
[Fusarium_vanettenii_77-13-4]_XP_003050716.1	TIIAHS	MGGGLD	ARYMLAHLKP	...LPVRVA	LVTIATPHRGS	FADYLVLE..QVS..PL	
[Fusarium_solani]_XP_046134414.1	TIIAHS	MGGGLD	ARYMLAHLNP	...LPVRVA	LVTIATPHRGS	FADYLVLE..QVS..PL	
[Fusarium_albosuccineum]_KAF4468415.1	TIIAHS	MGGGLD	ARYMLAHLAP	...LPVRVA	LVTIATPHRGS	FADYLVLE..QVS..PL	
[Fusarium_decemcellulare]_KAF50111412.1	TIIAHS	MGGGLD	ARYMLAHLTP	...LPVRVA	LVTIATPHRGS	FADYLVLE..QVS..PL	
[Fusarium_sarcochroum]_KAF4964785.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTIATPHRGS	FADYLVLE..EVS..PL
[Fusarium_avenaceum]_KAH696852.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTIATPHRGS	FADYLVLE..EVS..PL
[Fusarium_avenaceum]_KIL96274.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTIATPHRGS	FADYLVLE..EVS..PL
[Fusarium_avenaceum]_KAG5656265.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTIATPHRGS	FADYLVLE..EVS..PL
[Fusarium_tricinatum]_KAH7262197.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTIATPHRGS	FADYLVLE..EVS..PL
[Fusarium_heterosporum]_KAF5663380.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTIATPHRGS	FADYLVLE..EVS..PL
[Fusarium_sp._MPI-SDFR-AT-0072]_KAH7164412.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_oxysporum_f._sp._rapae]_KAG7414252.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_mangiferae]_XP_041681833.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_proliferatum]_CVL11341.1	TIIV	HS	MGGGLD	ARYMLSHLTP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_proliferatum_ET1]_XP_031083673.1	TIIV	HS	MGGGLD	ARYMLSHLTP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_fujikuroi]_SCN78580.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_fujikuroi_IMI_58289]_XP_023430709.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_sp._NRRL_25303]_KAF5626228.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_xylarioides]_KAG5746670.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_xylarioides]_KAG5788219.1	TIIV	HS	MGGGLD	ARYMLSHLAL	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_pseudocircinatum]_KAF5575212.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_pseudoanthophilum]_KAF5575021.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_verticilliioides]_RBQ71412.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_verticilliioides_7600]_XP_018746479.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_oxysporum_NRRL_32931]_XP_031039788.1	TIIV	HS	MGGGLD	TRYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_oxysporum_f._sp._lycopersici_4287]_XP_0	TIIV	HS	MGGGLD	TRYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_oxysporum_f._sp._cepae]_RKK20771.1	TIIV	HS	MGGGLD	TRYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_redolens]_XP_04051341.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_austroafricanum]_KAF4458007.1	TIIV	HS	MGGGLD	ARYMLSHLAP	...LPVHVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_flagelliforme]_XP_045986929.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_sp._FIESC_RH6]_KAT1056250.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PL
[Fusarium_sporotrichioides]_RGP72309.1	TIIV	HS	MGGGLD	ARYMLSLRLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PV
[Fusarium_poeae]_XP_044713592.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PV
[Fusarium_venenatum]_XP_025590637.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PV
[Fusarium_pseudograminearum]_KAF0641638.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PV
[Fusarium_graminearum]_CAG1993854.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PV
[Fusarium_graminearum]_PCD31638.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PV
[Fusarium_graminearum]_CZS78629.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PV
[Fusarium_graminearum]_CAF3606094.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PV
[Fusarium_graminearum_PH-1]_XP_011318944.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PV
[Fusarium_culmorum]_QPC68571.1	TIIV	HS	MGGGLD	ARYMLSHLDP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PV
[Fusarium_pseudograminearum]_QPC77441.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PV
[Fusarium_longipes]_RGP79158.1	TIIV	HS	MGGGLD	ARYMLSHLEP	...LPVRVA	LVTVATPHRGS	FADYLVLE..EVS..PV
[Ilyonectria_destructans]_KAH7011941.1	NIIAHS	MGGGLD	ARYMLAHMSP	...PVRVA	LVTVATPHRGS	FADYLVLEE..G..G..PI	
[Ilyonectria_sp._MPI-CAGE-AT-0026]_KAH6985660.1	NIIAHS	MGGGLD	ARYMLAHMSP	...PVRVA	LVTVATPHRGS	FADYLVLEE..G..G..PI	
[Ilyonectria_robusta]_XP_046104990.1	NIIAHS	MGGGLD	ARYMLAHMSP	...PVRVA	LVTVATPHRGS	FADYLVLEE..G..G..PI	
[Dactylonectria_estremocensis]_KAH7149692.1	NIIAHS	MGGGLD	ARYMLAHMSP	...APVRVA	LVTVATPHRGS	FADYLVLEE..G..G..PI	
[Dactylonectria_macrodidyma]_KAH7148923.1	NIIAHS	MGGGLD	ARYMLAHMSP	...APIPVA	LVTVATPHRGS	FADYLVLEE..G..G..PI	
[Thelonectria_olida]_KAH6899778.1	NIIAHS	MGGGLD	ARYMLSHMAP	...TPVKVA	LVTVATPHRGS	FADYLVLDK..NLA..PI	
[Stachybotrys_chartarum_IBT_7711]_KEY69997.1	NIIAHS	MGGGLD	ARYMVANLRP	...KGVRA	LVTVATPHRGS	FADYLVLE..Q..Q..PI	
[Stachybotrys_chartarum_IBT_40293]_KFA50745.1	NIIAHS	MGGGLD	ARYMVANLRP	...KGVRA	LVTVATPHRGS	FADYLVLE..Q..Q..PI	
[Stachybotrys_chlorohalonata_IBT_40285]_KFA62815.1	NIIAHS	MGGGLD	ARYMVANLRP	...KGVRA	LVTVATPHRGS	FADYLVLE..Q..Q..PI	
[Purpureocillium_lilacinum]_XP_018174914.1	NIIAHS	MGGGLD	ARHLISSILP	SSPQHNFVA	LTISTPHRGS	FADYVLSD..SRRS..LL	
[Clonostachys_solani]_CAH0059244.1	NIIAHS	MGGGLD	ARYLASRLAP	...DSVAIKS	ITITATPHRGS	HFADFLMSD..SA..PI	
[Clonostachys_rosea]_VUC36940.1	NIIAHS	MGGGLD	ARYLASRLAP	...DSVVKIS	ITITATPHRGS	HFADFLMSD..SA..PI	
[Clonostachys_rhizophaga]_CAH0026503.1	NIIAHS	MGGGLD	ARYLASCLAP	...DSVAIKS	ITITATPHRGS	HFADFLMSD..SA..PI	
[Emericellopsis_atlantica]_XP_046114137.1	NIIAHS	MGGGLD	ARYMISHLPP	...KYVDIAS	LVTVASPHRGS	FADYVLQED..G..G..LV	
[Acremonium_chrysogenum_ATCC_11550]_KFH46845.1	NIIAHS	MGGGLD	ARYMIRHLPP	...RTAEVAS	LVTVSTPHRGS	HFADYVLDE..DAAD..G..LV	
[Pochonia_chlamydosporia_170]_XP_018148143.1	NVVAHS	MGGGLD	ARWMISNILKP	ERSLKVAS	LTISTPHRGS	PFADYVLHS..SSG..IM	
[Epichloe_festueae_F11]_QPG98063.1	NIIAHS	MGGGLD	ARYMISKMATQ	TQRIQVSS	LTIVSTPHRGS	PFADYVLHS..SSG..IM	
[Colletotrichum_incanum]_KZL82863.1	NIIAHS	MGGGLD	ARYMISHLKP	...ANVKVMS	LVTVATPHRGS	FADYLVLE..RG..PI	
[Colletotrichum_simmondsii]_KXH39849.1	NIIAHS	MGGGLD	ARYMISHLKP	...RDVKVLS	LVTVATPHRGS	FADYLVLDG..QG..PI	
[Colletotrichum_sojae]_KAF6819546.1	NIIAHS	MGGGLD	ARYMISHLKP	...RDVDRSL	LVTVATPHRGS	FADYLVLDG..RG..PI	

[Trichoderma harzianum]_ThaL

α6 α7 α8 β5
210 220 230 240 250

[Trichoderma harzianum]_ThaL	H..	LPR	LV	GV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	A	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma harzianum]_KKO99473.1	H..	LPR	LV	GV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	A	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma guizhouense]_OPB43634.1	H..	LPR	LV	GV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	G	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma simmonsii]_QYS94233.1	H..	LPR	LV	GV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	G	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma harzianum_CBS_226.95]_XP_024777038.1	H..	LPR	LV	GV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	G	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma harzianum]_PKK42226.1	H..	LPR	LV	GV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	G	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma lentiforme]_KAF3077685.1	H..	LPR	LV	GV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	G	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma harzianum]_PNP59423.1	H..	LPR	LV	GV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	A	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma virens_FT-333]_UKZ73321.1	H..	LPR	LV	GV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	A	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma virens_Gv29-8]_XP_013960763.1	H..	LPR	LV	GV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	A	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma asperellum_CBS_433.97]_XP_024756506.1	H..	LPR	LV	GV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	A	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma atroviride_IMI_206040]_XP_013943551.1	H..	LPR	LV	SI	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	A	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma gamsii]_PNP38305.1	H..	LPR	LV	SI	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	A	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma gamsii]_XP_018663207.1	H..	LPR	LV	SI	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	A	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma arundinaceum]_RFU75476.1	H..	LPR	LV	GI	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	S	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma gracile]_KAH0498535.1	H..	LPR	LV	SV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	R	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma reesei_QM6a]_XP_006968245.1	H..	LPR	LV	SV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	Q	A	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma citrinoviride]_XP_024753310.1	H..	LPR	LV	SV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	A	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Trichoderma longibrachiatum_ATCC_18648]_PTB78011	H..	LPR	LV	SV	IR	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	R	E	E	F	N	P	R	V	R	D	E	G	V	R	Y	F	S	Y	G	A	A	I	D	E	P	..	S	L			
[Hirsutella minnesotensis_3608]_KJZ78693.1	Y..	LPK	LV	GV	LK	KAG	L	G	T	S	A	F	G	Q	L	T	RY	M	V	N	E	F	N	P	R	V	R	D	N	P	S	V	R	Y	F	S	Y	G	S	V	T	D	T	P	..	P	V		
[Hirsutella rhossiliensis]_XP_044725020.1	Y..	LPK	LV	RL	LE	KAG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	Q	E	F	N	P	R	V	R	D	T	D	P	L	V	R	Y	F	S	Y	G	A	V	I	D	K	P	..	P	L	
[Ophiocordyceps sinensis_CO18]_EQK99704.1	H..	LPR	LV	RV	LE	KAG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	Q	E	F	N	P	R	V	R	D	T	D	P	S	V	R	Y	F	S	Y	G	A	V	S	D	A	P	..	S	L	
[Tolypocladium capitatum]_PNY29418.1	Y..	LPR	LV	GV	LQ	RAG	L	G	T	S	A	F	G	Q	L	T	RY	L	A	D	E	F	N	P	R	V	R	D	T	D	P	S	V	R	Y	F	S	Y	G	A	A	M	N	E	P	..	P	L	
[Tolypocladium ophioglossoides_CBS_100239]_KND888	Y..	LPK	LV	GV	LQ	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	D	E	F	N	P	R	V	R	D	T	D	P	S	V	R	Y	F	S	Y	G	A	A	M	N	E	P	..	P	L	
[Tolypocladium paradoxum]_POR38551.1	H..	LPR	LV	GV	LQ	RAG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	D	E	F	N	P	R	V	R	D	D	E	P	V	R	Y	F	S	Y	G	A	V	M	R	E	P	..	P	L		
[Drechmeria coniospora]_ODA83100.1	Y..	LPR	LV	SL	LER	AG	L	G	T	S	A	F	G	Q	L	T	RY	L	A	T	E	F	N	P	R	V	R	D	P	A	V	R	Y	F	S	Y	G	A	V	V	E	D	L	..	P	L			
[Drechmeria coniospora]_XP_040657415.1	Y..	LPR	LV	SL	LER	AG	L	G	T	S	A	F	G	Q	L	T	RY	L	A	T	E	F	N	P	R	V	R	D	P	A	V	R	Y	F	S	Y	G	A	V	V	E	D	L	..	P	L			
[Ophiocordyceps unilateralis]_PFH57814.1	H..	LPR	LV	GL	LR	VGL	T	S	A	F	G	Q	L	T	RY	M	T	D	D	F	N	P	R	V	R	D	E	D	S	V	R	Y	F	S	Y	G	A	V	A	P	S	P	..	P	L				
[Fusarium sp._AF-6]_RSL54391.1	H..	LPR	LV	WM	LER	AG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	D	E	F	N	P	R	V	R	D	T	C	D	S	V	H	Y	F	S	Y	G	A	A	V	E	R	P	..	A	L	
[Fusarium_kuroshium]_RMJ16314.1	H..	LPR	LV	WM	LER	AG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	D	E	F	N	P	R	V	R	D	T	C	D	S	V	H	Y	F	S	Y	G	A	A	V	E	R	P	..	A	L	
[Fusarium_sp._AF-8]_RSL70798.1	H..	LPR	LV	WM	LER	AG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	D	E	F	N	P	R	V	R	D	T	C	D	S	V	H	Y	F	S	Y	G	A	A	V	E	R	P	..	A	L	
[Fusarium_ambrosium]_RSM11997.1	H..	LPR	LV	WM	LER	AG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	D	E	F	N	P	R	V	R	D	T	C	D	S	V	H	Y	F	S	Y	G	A	A	V	E	R	P	..	A	L	
[Fusarium_floridanum]_RSL80024.1	H..	LPR	LV	WM	LER	AG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	D	E	F	N	P	R	V	R	D	T	C	D	S	V	H	Y	F	S	Y	G	A	A	V	E	R	P	..	A	L	
[Fusarium_vanettenii_77-13-4]_XP_003050716.1	H..	LTR	LV	WM	LER	AG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	D	E	F	N	P	R	V	R	D	T	C	D	S	V	H	Y	F	S	Y	G	A	A	V	E	R	P	..	A	L	
[Fusarium_solani]_XP_046134414.1	H..	LPR	LV	WM	LER	AG	L	G	T	S	A	F	G	Q	L	T	RY	M	T	D	E	F	N	P	R	V	R	D	T	C	D	S	V	H	Y	F	S	Y	G	A	A	V	E	R	P	..	A	L	
[Fusarium_albosuccineum]_KAF4468415.1	H..	LPR	LV	KT	LER	AG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	D	E	F	N	P	R	V	R	D	T	C	A	D	S	V	H	Y	F	S	Y	G	A	A	V	E	Q	P	..	A	M
[Fusarium_decemcellulare]_KAF50511412.1	H..	LPR	LV	KT	LER	AG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	D	E	F	N	P	R	V	R	D	T	C	A	D	S	V	H	Y	F	S	Y	G	A	A	V	E	R	P	..	A	L
[Fusarium_sarcochroum]_KAF4964785.1	HRY	LPR	LV	HT	LE	KAG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	E	E	F	N	P	R	V	R	D	T	K	P	D	V	R	Y	F	S	Y	G	A	A	V	E	Q	P	..	P	L	
[Fusarium_avenaceum]_KAG696852.1	HQY	LPR	LV	QT	FE	KAG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	E	E	F	N	P	R	V	R	D	T	R	P	D	V	R	Y	F	S	Y	G	A	A	V	E	Q	P	..	A	L	
[Fusarium_avenaceum]_KIL96274.1	HQY	LPR	LV	QT	FE	KAG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	E	E	F	N	P	R	V	R	D	T	R	P	D	V	R	Y	F	S	Y	G	A	A	V	E	Q	P	..	A	L	
[Fusarium_avenaceum]_KAG5656265.1	HQY	LPR	LV	QT	FE	KAG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	E	E	F	N	P	R	V	R	D	T	R	P	D	V	R	Y	F	S	Y	G	A	A	V	E	Q	P	..	A	L	
[Fusarium_tricinctum]_KAT7262197.1	HQY	LPR	LV	QT	FE	KAG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	E	E	F	N	P	R	V	R	D	T	R	P	D	V	R	Y	F	S	Y	G	A	A	V	E	H	P	..	A	L	
[Fusarium_heterosporum]_KAF5663380.1	HQY	LPR	LV	HT	LE	KAG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	E	E	F	N	P	R	V	R	D	T	Q	P	D	V	R	Y	F	S	Y	G	A	A	V	E	Q	P	..	A	L	
[Fusarium_sp._MPI-SDFR-AT-0072]_KAH7164412.1	HQY	LPR	LV	QT	FE	KAG	L	G	T	S	A	F	G	Q	L	T	RY	M	A	E	E	F	N	P	R	V	R	D	T	Q	P	D	V	R	Y	F	S	Y	G	A	A	V							

[illegible]

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320 330 340

[illegible]

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[*Trichoderma harzianum*]_ThaL
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 [*Trichoderma virens*]_Gv29-8]_XP_013960763.1
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 [*Trichoderma gracile*]_KAH0498535.1
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 [*Trichoderma citrinoviride*]_XP_024753310.1
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 [*Pochonia chlamydosporia*]_170]_XP_018148143.1
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