

Table S4 Source organisms of the proteins in the study. The organisms from which all proteins used in this study were derived are listed in the NCBI database (Sayers *et al.*, 2020).

domain	genus	species	strains
fungi	Cryptococcus	<i>Cryptococcus neoformans</i>	var. neoformans JEC21
			var. grubii H99
			var. grubii Tu259-1
		<i>Cryptococcus gattii</i>	WM276
			VGI
		<i>Cryptococcus amyloletus</i>	CBS 6039
	<i>Trichosporon</i>	<i>Trichosporon asahii</i>	CBS 2479
	<i>Rhizopus</i>	<i>Rhizopus stolonifer</i>	<i>Rhizopus stolonifer</i>
		<i>Rhizopus circinans</i>	<i>Rhizopus circinans</i>
	<i>Phycomyces</i>	<i>Phycomyces blakesleeanus</i>	<i>Phycomyces blakesleeanus</i>
	<i>Amylomyces</i>	<i>Amylomyces rouxii</i>	<i>Amylomyces rouxii</i>
	<i>Gongronella</i>	<i>Gongronella butleri</i>	<i>Gongronella butleri</i>
	<i>Kwoniella</i>	<i>Kwoniella pini</i>	CBS 10737
		<i>Kwoniella dejecticola</i>	CBS 10117
		<i>Kwoniella bestiolae</i>	CBS 10118
	<i>Schizophyllum</i>	<i>Schizophyllum commune</i>	<i>Schizophyllum commune</i>
	<i>Saccharomyces</i>	<i>Saccharomyces cerevisiae</i>	S288C
	<i>Aspergillus</i>	<i>Aspergillus awamori</i>	<i>Aspergillus awamori</i>
		<i>Aspergillus nidulans</i>	FGSC A4
		<i>Aspergillus oryzae</i>	RIB40
		<i>Aspergillus niger</i>	CBS 513.88
		<i>Aspergillus fumigatus</i>	Af293
		<i>Aspergillus fischeri</i>	NRRL 181
	<i>Schizosaccharomyces</i>	<i>Schizosaccharomyces pombe</i>	<i>Schizosaccharomyces pombe</i>
		<i>Schizosaccharomyces octosporus</i>	yFS286
		<i>Schizosaccharomyces cryophilus</i>	OY26
		<i>Schizosaccharomyces japonicus</i>	yFS275
	<i>Pestalotiopsis</i>	<i>Pestalotiopsis sp.</i>	isolate
		<i>Pestalotiopsis fici</i>	W106-1
	<i>Trichophyton</i>	<i>Trichophyton benhamiae</i>	CBS 112371
	<i>Podospira</i>	<i>Podospira anserina</i>	S mat+
	<i>Colletotrichum</i>	<i>Colletotrichum lindemuthianum</i>	<i>Colletotrichum lindemuthianum</i>
	<i>Pyricularia</i>	<i>Pyricularia oryzae</i>	70-15
		<i>Pyricularia grisea</i>	<i>Pyricularia grisea</i>
	<i>Pochonia</i>	<i>Pochonia chlamydosporia</i>	170
	<i>Fusarium</i>	<i>Fusarium graminearum</i>	PH-1
		<i>Fusarium pseudograminearum</i>	CS3096
		<i>Fusarium venenatum</i>	<i>Fusarium venenatum</i>
		<i>Fusarium langsethiae</i>	<i>Fusarium langsethiae</i>
		<i>Fusarium fujikuroi</i>	<i>Fusarium fujikuroi</i>
	<i>Botrytis</i>	<i>Botrytis cinerea</i>	B05.10
	<i>Sclerotinia</i>	<i>Sclerotinia sclerotiorum</i>	1980 UF-70
	<i>Chaetomium</i>	<i>Chaetomium globosum</i>	CBS 148.51
	<i>Parastagonospora</i>	<i>Parastagonospora nodorum</i>	SN15
	<i>Blumeria</i>	<i>Blumeria graminis</i>	<i>Blumeria graminis</i>

	<i>Flammulina</i>	<i>Flammulina velutipes</i>	<i>Flammulina velutipes</i>
	<i>Puccinia</i>	<i>Puccinia graminis</i>	f. sp. tritici CRL 75-36-700-3
	<i>Encephalitozoon</i>	<i>Encephalitozoon cuniculi</i>	GB-M1
		<i>Encephalitozoon romaleae</i>	SJ-2008
amoeba	<i>Entamoeba</i>	<i>Entamoeba histolytica</i>	HM-1:IMSS
	<i>Arthrobacter</i>	<i>Arthrobacter</i> sp.	AW19M34-1
	<i>Clostridium</i>	<i>Clostridium thermocellum</i>	<i>Clostridium thermocellum</i>
	<i>Streptomyces</i>	<i>Streptomyces lividans</i>	1326
	<i>Streptococcus</i>	<i>Streptococcus mutans</i>	serotype c ATCC 700610 serotype c UA159
		<i>Streptococcus pneumoniae</i>	ATCC BAA-255 R6
	<i>Agathobacter</i>	<i>Agathobacter rectalis</i>	strain ATCC 33656 DSM 3377 JCM 17463 KCTC 5835 VPI 0990
	<i>Bacillus</i>	<i>Bacillus cereus</i>	strain Q1 ATCC 14579 DSM 31 JCM 2152 NBRC 15305 NCIMB 9373 NRRL B-3711
		<i>Bacillus subtilis</i>	subsp. subtilis str. 168
		<i>Bacillus anthracis</i>	str. 'Ames Ancestor'
	<i>Rhizobium</i>	<i>Rhizobium meliloti</i>	strain 1021
bacteria	<i>Bradyrhizobium</i>	<i>Bradyrhizobium</i> sp.	strain ANU 289 strain NC92
		<i>Bradyrhizobium elkanii</i>	<i>Bradyrhizobium elkanii</i>
	<i>Neorhizobium</i>	<i>Neorhizobium galegae</i>	<i>Neorhizobium galegae</i>
	<i>Rhizobium</i>	<i>Rhizobium leguminosarum</i>	bv. Trifolii bv. viciae 248 bv. Phaseoli
	<i>Sinorhizobium</i>	<i>Sinorhizobium fredii</i>	NGR234
	<i>Azorhizobium</i>	<i>Azorhizobium caulinodans</i>	ATCC 43989 DSM 5975 JCM 20966 NBRC 14845 NCIMB 13405 ORS 571
	<i>Mesorhizobium</i>	<i>Mesorhizobium japonicum</i>	LMG 29417 CECT 9101 MAFF 303099
	<i>Bordetella</i>	<i>Bordetella bronchiseptica</i>	<i>Bordetella bronchiseptica</i>
	<i>Escherichia</i>	<i>Escherichia coli</i>	str. K-12 substr. MG1655
	<i>Aggregatibacter</i>	<i>Aggregatibacter actinomycetemcomitans</i>	HK1651
	<i>Ammonifex</i>	<i>Ammonifex degensii</i>	DSM 10501 KC4

<i>Shewanella</i>	<i>Shewanella</i>	<i>Shewanella</i>
	<i>Shewanella woodyi</i>	ATCC 51908 MS32
<i>Vibrio</i>	<i>Vibrio cholerae</i>	O1 biovar El Tor str. N16961
	<i>Vibrio parahaemolyticus</i>	<i>Vibrio parahaemolyticus</i>