

Table S2. List of enzymes used for aminoacid composition analysis.

	Activity	Kingdom	Organism	Accession number	Reference		
Cold-adapted	Serine protease	Fungi	<i>Glaciozyma antarctica</i> PI12	AYC49704.1 ^G	[48]		
			<i>Linnemannia hyalina</i> SCG-10	KAG9065897.1 ^G	[49]		
			<i>Glaciozyma antarctica</i> PI12	CAQ76821.1 ^G	[50]		
		Bacteria	<i>Vibrio</i> sp. PA-44	AAO16017.1 ^G	[51]		
			<i>Shewanella piezotolerans</i> WP3 / JCM 13877	WP_020914201 ^R	[52]		
			<i>Colwellia psychrerythraea</i> 34H / ATCC BAA-681	WP_011043668.1 ^R	[53]		
	Lipase	Fungi	<i>Onygenales</i> sp. P7	ADY17230.1 ^G	[54]		
			<i>Emericella nidulans</i> NFCCI 3643	EAA64964.1 ^G	[55]		
			<i>Pseudomonas fluorescens</i> B68	AAU10321.1 ^G	[56]		
		Bacteria	<i>Bacillus pumilus</i> 1_16A	WP_065098612.1 ^R	[57]		
			Chitinase	Fungi	<i>Glaciozyma antarctica</i> PI12	AEH16745.1 ^G	[58]
					<i>Linnemannia hyalina</i> SCG-10	KAG9072959.1 ^G	[59]
Bacteria	<i>Vibrio</i> sp. Fi:7	AAG12973.1 ^G		[60]			
	<i>Pseudoalteromonas</i> sp. DL-6	QBJ64793.1 ^G		[61]			
Mesophilic	Serine protease	Fungi	<i>Parengyodontium album</i>	1IC6 ^P	[62]		
			<i>Metarhizium acridum</i> CQMa 102	XP_007814452.1 ^R	[63]		
			<i>Metarhizium robertsii</i> ARSEF 23	XP_011411569.1 ^R	[63]		
		Bacteria	<i>Staphylococcus epidermidis</i> Tu 3298	CAA44257.1 ^G	[64]		
			<i>Enterococcus faecalis</i> MMH594	AAK67268.1 ^G	[65]		
			<i>Clostridium</i> sp. BNL1100	AEY65929.1 ^G	[66]		
	Lipase	Fungi	<i>Tuber melanosporum</i> Mel28	5MII ^P	[67]		
			<i>Rhizopus delemar</i> RA 99-880	EIE86673.1 ^G	[68]		
		Bacteria	<i>Bacillus subtilis</i> 168	NP_388152.1 ^R	[69]		
			<i>Proteus mirabilis</i> PM185	OZS69007.1 ^G	[70]		
			<i>Bacillus pumilus</i> F3	ABK80759.1 ^G	[71]		
		Chitinase	Fungi	<i>Trichoderma reesei</i> PC-3-7	OTA05027.1 ^G	[72]	
	<i>Trichoderma reesei</i> PC-3-8			BAD44715.1 ^G	[72]		
	<i>Aspergillus niger</i> An76			GAQ37864.1 ^G	[73]		
	<i>Trichoderma viride</i> LTR-2			ABR27743.1 ^G	[74]		
	Bacteria		<i>Bacillus circulans</i> WL-12	1ITX ^P	[75]		
			<i>Paenibacillus pasadenensis</i> CS0611	ASO66300.1 ^G	[76]		
	Thermophilic	Serine protease	Fungi	<i>Thermus thermophilus</i> JCM10941	BDA37360.1 ^G	[77]	
<i>Thermoascus aurantiacus</i> var. Levisporus				ABY71274.1 ^G	[78]		
Bacteria			<i>Pyrolobus fumarii</i> 1A	AEM38280.1 ^G	[79]		
			<i>Thermococcus kodakaraensis</i>	WP_011250640.1 ^R	[80]		
Lipase		Fungi	<i>Thermomyces lanuginosus</i> T03	ABV69591.1 ^G	[81]		
			<i>Thermothelomyces thermophilus</i> ATCC 42464	XP_003664847.1 ^R	[82]		
			<i>Thermothelomyces thermophilus</i> ATCC 42464	XP_003659962.1 ^R	[82]		
		Bacteria	<i>Geobacillus</i> sp.	WP_014195917.1 ^R	[83]		
			<i>Geobacillus</i> sp.	WP_033008930.1 ^R	[83]		
			Chitinase	Fungi	<i>Thermochaetoides thermophila</i> DSM 1495	XP_006692378.1 ^R	[84]
<i>Thermoascus aurantiacus</i> var. Aurantiacus		ADT82646.1 ^G			[85]		
<i>Thermochaetoides thermophila</i> DSM 1495		XP_006692378.1 ^R			[84]		
<i>Thermoascus aurantiacus</i> var. Levisporus	ABS00927.1 ^G	[85]					
Bacteria	<i>Acetivibrio thermocellus</i> ATCC 27405	CAA93150.1 ^G	[86]				

^G Genbank accession number; ^R NCBI Reference Sequence accession number; ^P Protein Data Bank structure ID.