

Enzyme	Origin	T _{opt}	pH _{opt}	Stability	Reference
Cellulases	<i>Chrysosporium</i>	N/A	5.0-5.5	Stable at 50°C for 24 h,	[225]
Cellobiohydrolase	<i>lucknowense</i>			t _{1/2} (65°C): 3 h	
<i>CBH1A</i>	<i>Talaromyces</i> <i>emersonii</i>	78	3.6	N/A	[278]
β-1,4-Endoglucanase	N/A	55- 60°C	N/A	N/A	THOR
<i>THORZYM™</i>	<i>Thermotoga</i> <i>maritima MSB8</i>	95°C	6.0-7.5	90 % activity after 6h at 80°C.	[279]
(endocellulase A and B)	<i>Thermotoga</i> <i>neapolitana</i>	95°C (A), 106°C (B)	6.0 (A), 6.0-6.6 (B)	CelB is stable 130 min at 106°C.	[280]
β-1,4-Endoglucanase (β-1,(3)4- Endoglucanase)	<i>Rhodothermus</i> <i>marinus</i>	90°C	6-8	t _{1/2} (90°C): 3 h, T _m at 120°C	[281]
β-Glucosidase	<i>Thermotoga</i> <i>maritima</i>	N/A	N/A	Stable >4 years at 4°C	Megazyme
(Bgl3B)	<i>Thermotoga</i> <i>neapolitana</i> (DSM4359)	90°C	5-6	T _m at 90°C	[282]
(BglB)	<i>Thermotoga</i> <i>neapolitana</i> (strain Z2706- MC24)	90°C	6-7	stable 3h at 90°C	[283]
(Bgl1A)	<i>Thermotoga</i> <i>neapolitana</i>	100°C	5-6	T _m at 102°C	Turner P, Nordberg

					Karlsson E, unpublished data
	<i>Pyrococcus furiosus</i>	102- 105°C	N/A	t _{1/2} (100°C): 85 h	[284]
Hemicellulases					
α-arabinofuranosidase	<i>Bacillus pumilus</i>	55	7	t _{1/2} (75°C): 135 min	[285]
	<i>Geobacillus stearothermophilus</i>	70	7	t _{1/2} (70°C): 75 min (pH 7)	[223]
	<i>Rhodothermus marinus</i>	85	5.5-7.0	t _{1/2} (85°C): 8.3 h, t _{1/2} (90°C): 17 min	[286]
	<i>Thermobacillus xylanilyticus</i>	75	5.6-6.2	t _{1/2} (90°C): 2 h (pH 8)	[287]
β-mannanase	<i>Thermotoga maritima</i>	90°C	7	Stable >2 years at 4°C	Megazyme, [288]
	<i>Rhodothermus marinus</i>	85°C	5-7	25 % of initial activity after 1h 90°C	[289]
β-mannosidase	<i>Thermotoga neapolitana</i>	92	7.0	t _{1/2} (90°C): 38 min	[288]
xylanase	<i>Rhodothermus marinus</i>	85°C	7	T _m at 93°C, in presence of Ca ²⁺	[290]
	<i>Thermotoga maritima</i>	95°C	5-8	Stable at 100°C for several hours	[291]
	<i>MULTIFECT CX 12L® Trichoderma resei</i>	55	5	N/A	[242]
	<i>Luminase™</i>	N/A	40-70	6-8	N/A Diversa
Xylanase	<i>Bacillus halodurans</i>	70	9.0-9.5	t _{1/2} (65°C): > 3h	[292]
Pectinases					

α -Galactosidase	<i>Thermotoga neapolitana</i>	99	7.0	$t_{1/2}$ (100°C): 3 min	[293]
Polygalacturonate hydrolase	<i>Sporotrichum thermophile</i>	55	7	$t_{1/2}$ (65°C): 4 h	[143]
α -L-rhamnosidase	<i>Clostridium stercorarium</i>	60	N/A	N/A	[142]
<i>RhmA</i>	<i>Thermomicrobium</i> sp.	70	7.9	60°C, 24 h \Rightarrow 20% activity	[138]
<i>RhmB</i>	<i>Thermomicrobium</i> sp.	70	5.0-6.9	60°C, 24 h \Rightarrow 20% activity	[138]

N/A: not available