

CAZyme™ β -Glucosidase 1

Technical Specifications



Catalog No. 31571-1 2 mg (0.1 ml)
 Lot No.

Store at 4°C. Do not re-freeze.
 For *In Vitro* Research Use Only.
 Not for Drug or Diagnostic use. Not for use in humans or animals.

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Product Description	CAZyme β -Glucosidase 1, thermostable, recombinant expressed in <i>E. coli</i> cells. 20 mg/ml. MW = 53 kDa
Purity	\geq 90% pure on Coomassie stained SDS-PAGE.
Recommended Reaction Conditions	β -glucosidase 1 is active between pH 4.0 and 8.0 at 70°C.
Specific Activity	31 units/mg.
Activity Determination	One β -glucosidase unit will produce 1 micromole of o-nitrophenol per minute at 70°C from a 1mM solution of 2-nitrophenyl- β -D-glucopyranoside in 50 mM sodium acetate, pH 5.8. Assay method available upon request.
Endoglucanase Activities	β -glucosidase 1 does not possess <i>endo</i> -xylanase, arabinoxylanase or β -glucanase activities when assayed using insoluble AZCL-linked substrates.
Exoglucanase Activities	β -glucosidase 1 possesses <i>exo</i> -cellulase, β -xylosidase and β -glucosidase activities.
Protein Concentration	20 mg/ml total protein as measured using the Bradford protein assay with BSA as standard.
Stability	Store at 4°C. If properly stored at 4°C, this product is guaranteed for 6 months from date of purchase.
Storage Buffer	50 mM Tris-HCl, pH 7.5, 100 mM NaCl, 25% glycerol.

Note: This enzyme is shipped frozen but should be stored at 4°C. Additional freeze/thaw cycles will result in decreased activity.

Warranty

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Length: 462aa
Theoretical pI: 6.03
Theoretical MW: 52,907 Da
PFAM Structure: GH1
Activity: β -glucosidase
Typical Specific Activity: 20-50 U/mg
Leader: (-)
Dockerin: (-)
Histag: (+)

Figure 1. Features of recombinant CAZyme β -Glucosidase 1.

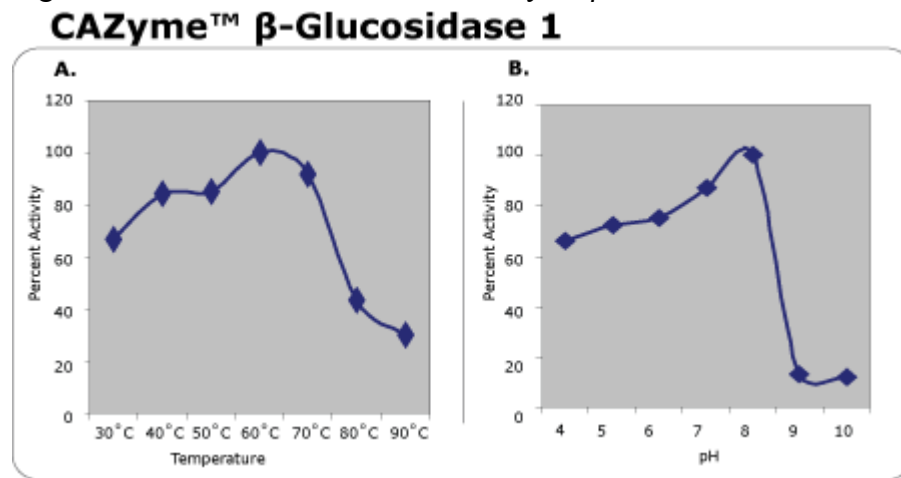


Figure 2. Temperature and pH tolerance of CAZyme β -Glucosidase 1. Assay conditions available upon request.