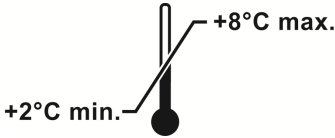


CAZyme™ CthBglA

Technical Specifications

Catalog No. 30572-1 2 mg (0.2 ml) Lot No.

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



C5•6 Technologies, Inc.

Product Description	CAZyme CthBglA, thermostable, recombinant expressed in <i>E. coli</i> cells, cloned from <i>Clostridium thermocellum</i> . 10 mg/ml. MW = 51 kDa
Recommended Reaction Conditions	CthBglA is active between pH 6.0 and 7.0 at 70°C. Optimum pH is 5.8 and optimum temperature is 60°C.
Purity	≥90% pure on Coomassie stained SDS-PAGE.
Specific Activity	26 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	CthBglA does not possess <i>endo</i> -xylanase, arabinoxylanase or β-glucanase activities when assayed using insoluble AZCL-linked substrates.
Exoglucanase Activities	CthBglA possesses <i>exo</i> -cellulase, β-xylosidase and β-glucosidase activities.
Protein Concentration	10 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.

Warranty

C5•6 Technologies warrants that its products will conform to the standards stated in its product specification sheets in effect at the time of shipment. C5•6 Technologies will replace, free of charge, any product that does not conform to the specifications. This warranty limits C5•6 Technologies' liability only to the replacement of the product. THIS WARRANTY IS EXCLUSIVE, AND C5•6 TECHNOLOGIES MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The stated express warranties, and the remedy provided for breach thereof, are in lieu of all other liability or obligations of C5•6 Technologies for any damages whatsoever arising out of or in connection with the delivery, use, performance, or the inability to use any of its products. IN NO EVENT SHALL C5•6 TECHNOLOGIES BE LIABLE UNDER ANY LEGAL THEORY (INCLUDING BUT NOT LIMITED TO CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT, OR WARRANTY OF ANY KIND) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES (INCLUDING BUT NOT LIMITED TO LOST PROFITS). Without limiting the effect of the preceding sentence, C5•6 Technologies's maximum liability, if any, shall not exceed the purchase price paid by buyer for the product.

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Length: 448aa
Theoretical pI: 6.04
Theoretical MW: 51,482 Da
PFAM Structure: GH1
Activity: β -glucosidase
Typical Specific Activity: 12-40 U/mg
Leader: (-)
Dockerin: (-)
HisTag: (-)

Figure 1. Features and sequence of recombinant CAZyme CthBglA (1).

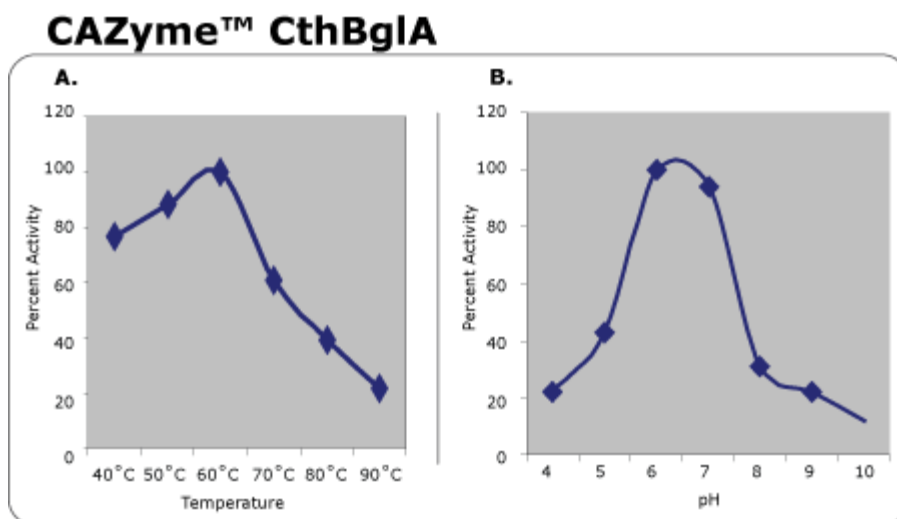


Figure 2. Temperature and pH tolerance of CAZyme CthBglA. Assay conditions available upon request.

1. Grabnitz, F., Seiss, M., Rocknagell, K. P., and Staudenbauer, W. L. (1991) Structure of the β -glucosidase gene *bglA* of *Clostridium thermocellum*. *Eur. J. Biochem.* **200**, 301.