

CAZyme™ CthCbhA
Technical Specifications



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Catalog No. 30620-1 2 mg (0.2 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.

Product Description	CAZyme CthCbhA, thermostable, recombinant expressed in <i>E. coli</i> cells, cloned from <i>Clostridium thermocellum</i> . MW = 138 kDa.
Purity	≥ 90% pure on Coomassie stained SDS-PAGE.
Recommended Reaction Conditions	CAZyme CthCbhA is active between pH 6.0 and 7.0 at 70°C.
Specific Activity	1.7 units/mg.
Activity Determination	One cellobiohydrolase unit will produce 1 micromole of p-nitrophenol per minute at 70°C from a 1mM solution of 4-nitrophenyl-β-D-cellobioside (N5759, Sigma) in 50 mM sodium acetate, pH 5.8. Assay method available upon request.
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.

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

Warranty

Lucigen warrants that its products will conform to the standards stated in its product specification sheets in effect at the time of shipment. Lucigen will replace, free of charge, any product that does not conform to the specifications. This warranty limits Lucigen's liability only to the replacement of the product. THIS WARRANTY IS EXCLUSIVE, AND LUCIGEN 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 Lucigen 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 LUCIGEN 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, Lucigen's maximum liability, if any, shall not exceed the purchase price paid by buyer for the product.

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Length: 1,209

Theoretical pI: 4.90

Theoretical MW: 136,000 Da

PFAM Structure: CBM4_9 Cel D_N GH9 CBM3

Activity: cellobiohydrolase

Typical Specific Activity: 1.7 u/mg

Leader: (-)

Dockerin: (+)

Histag: (+)

Esterase: (-)

Figure 1. Features and sequence of recombinant CAZyme Cellobiohydrolase 1.

CAZyme™ CthCbhA

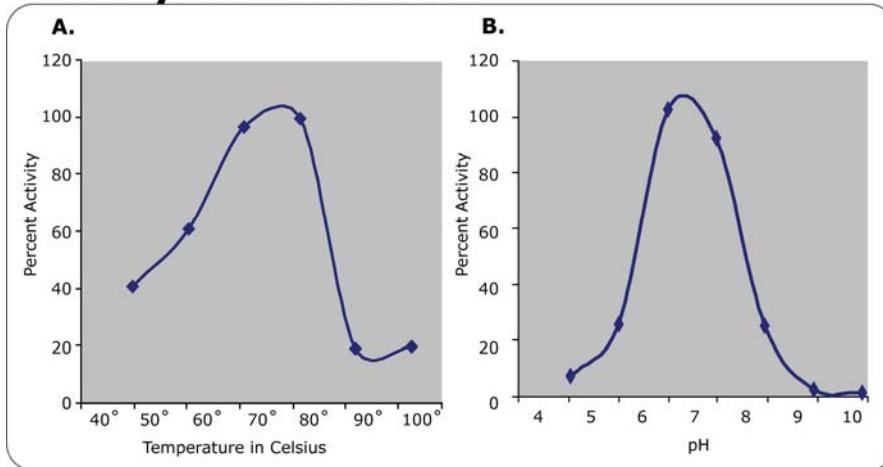


Figure 2. Temperature and pH tolerance of CAZyme Cellobiohydrolase 1. Assay conditions available upon request.