

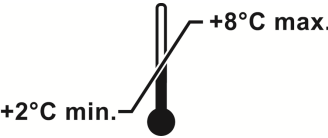
CAZyme™ CthCeLO



C5•6 Technologies, Inc.

Technical Specifications

Catalog No. 30559-1	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 CthCeLO, thermostable, recombinant expressed in <i>E. coli</i> cells, cloned from <i>Clostridium thermocellum</i> . 10 mg/ml. MW = 65 kDa
Purity	≥90% pure on Coomassie stained SDS-PAGE.
Recommended Reaction Conditions	CAZyme CthCeLO is active between pH 5.0 and 7.0 at 70°C. Optimum pH is 5.8 and optimum temperature is 70°C.
Specific Activity	19 units/mg.
Activity Determination	One cellulase unit will produce 1 micromole of reducing sugar per minute at 70°C from a 1% solution of β-glucan (Megazyme, P-BGBL) in 50 mM sodium acetate at 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.

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MDTSEEPALEGLS IHYMDGTL DVKYQSMRPYII IHNNSGMDVDMADLRVRYYYEKEGVTEE
VLTCFYTAIGADKIFA EFHPELGYAEIGFTSDAGI IKSGGNSGQLQLV LKKISNGYYDQSN
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ETSFVNTYENPRLDGLSSLEILDY TINHMKKNMGKAMIDMHSSTKDSYQENLWYNKDITME
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DYGPD IYMQPWFKKDFDINTLYEECWYPNWYYIVEQNIAPMLIGEWGGK LINENNRKWLEC
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TEDTFKYGHHHHHH
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Length: 563aa
Theoretical pI: 4.87
Theoretical MW: 64,673 Da
PFAM Structure: CBM3 GH5
Activity: exo-cellulase
Typical Specific Activity: 19 u/mg
Leader: (-)
Dockerin: (-)
Histag: (+)

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

CAZyme™ CthCelO

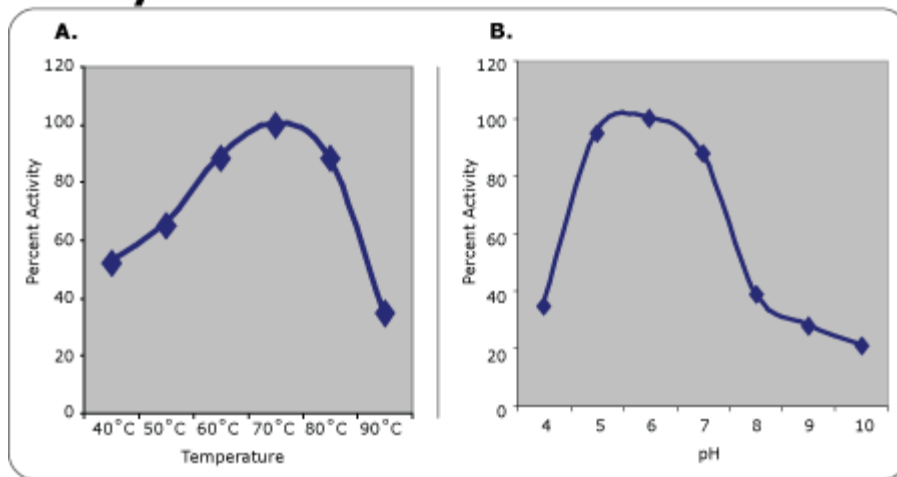


Figure 2. Temperature and pH tolerance of CAZyme CthCelG. Assay conditions available upon request.

1. Zverlov, V. V., Velikodvorskaya, G. A., and Schwarz, W. H. (2002) A newly described cellulosomal cellobiohydrolase, CelO, from *Clostridium thermocellum* : investigation of the exo-mode of hydrolysis, and binding capacity to crystalline cellulose. *Microbiology*. **148**, 247.