

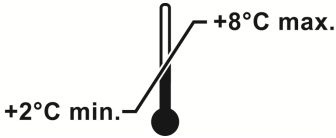
CAZyme™ CthCelG



C5•6 Technologies, Inc.

Technical Specifications

Catalog No. 30556-1	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 CthCelG, thermostable, recombinant expressed in <i>E. coli</i> cells, cloned from <i>Clostridium thermocellum</i> . 10 mg/ml. MW = 54 kDa
Purity	≥90% pure on Coomassie stained SDS-PAGE.
Recommended Reaction Conditions	CAZyme CthCelG is active between pH 6.0 and 8.0 at 70°C.
Specific Activity	75 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.

C5•6 Technologies 2905 Parmenter St, Middleton, WI 53562 USA
(608) 836.3587
info@c56technologies.com www.c56technologies.com

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MVDSNDDWLHCKGNKIYDMYGNEVWLTGANWFGFNCSSENCFHGAWYDVKTILTSIADRG
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MGYCKELGIKVMIDIHSPDANNSGHNYELWYGKETSTCGVVTTKMWIDTLVWLADKYKND
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DHKIPLGSKGISLGEYYGTPQASDPPATPTATPTKPAASSTPSFIYGDINSDGNVNS

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Length: 477aa
Theoretical pI: 5.00
Theoretical MW: 53,780 Da
PFAM Structure: GH5
Activity: endo-cellulase
Typical Specific Activity: 75 u/mg
Leader: (-)
Dockerin: (-)
Histag: (-)

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

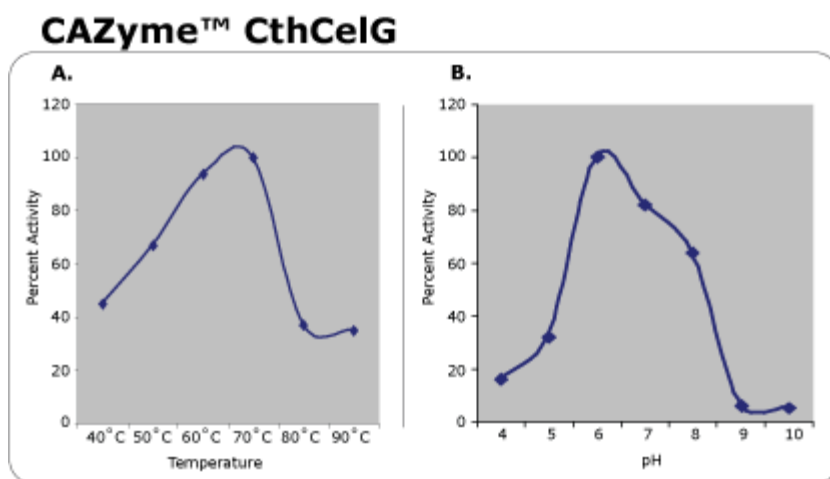


Figure 2. Temperature and pH tolerance of CAZyme CthCelG. Assay conditions available upon request.

1. Nucleotide Sequence of the celG Gene of *Clostridium thermocellum* and Characterization of Its Product, Endoglucanase CelG, Marc Lemaire and Pierre Beguin, *Journal of Bacteriology*, (1993), **175** p. 3353-3360