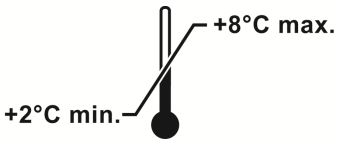
CAZyme™ CthCelE

Technical Specifications

Catalog No. 30553-1 2 mg (0.2 ml)
Lot No.



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

C5•6 Technologies, Inc.

Product Description	CAZyme CthCelE, thermostable, recombinant expressed in *E. coli* cells, cloned from *Clostridium thermocellum*. 10 mg/ml. MW = 43 kDa
Purity	≥90% pure on Coomassie stained SDS-PAGE.
Recommended Reaction Conditions	CAZyme CthCelE is active between pH 6.0 and 7.0 at 70°C.
Specific Activity	25 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 4ºC. Additional freeze/thaw cycles will result in decreased activity.

MKGFQVSGTKLLDASGNELVMRGMRDISAIDLVKEIKIGWNLGNTLDAPTETAWGNPRTT
KAMIEKVREMGFNAVRVPVTWDTHIGPAPDYKIDEAWLNRVEEVVNYVLDCGMYAIINVH
HDNTWIIPTYANEQRSKEKLVKVWEQIATRFKDYDDHLLFETMNEPREVGSPMEWMGGTY
ENRDVINRFNLAVVNTIRASGGNNDKRFILVPTNAATGLDVALNDLVIPNNDSRVIVSIH
AYSPYFFAMDVNGTSYWGSDYDKASLTSELDAIYNRFVKNGRAVIIGEFGTIDKNNLSSR
VAHAEHYAREAVSRGIAVFWWDNGYYNPGDAETYALLNRKTLSWYYPEIVQALMRGAGVE
PLVSPTPTPTLMPTPSPTVTA

Length: 381aa
Theoretical pI: 5.48
Theoretical MW: 42,810 Da
PFAM Structure: GH5
Activity: endo-cellulase
Typical Specific Activity: 25 u/mg
Leader: (-)
Dockerin: (-)
Histag: (-)
Lipase/esterase: (-)

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

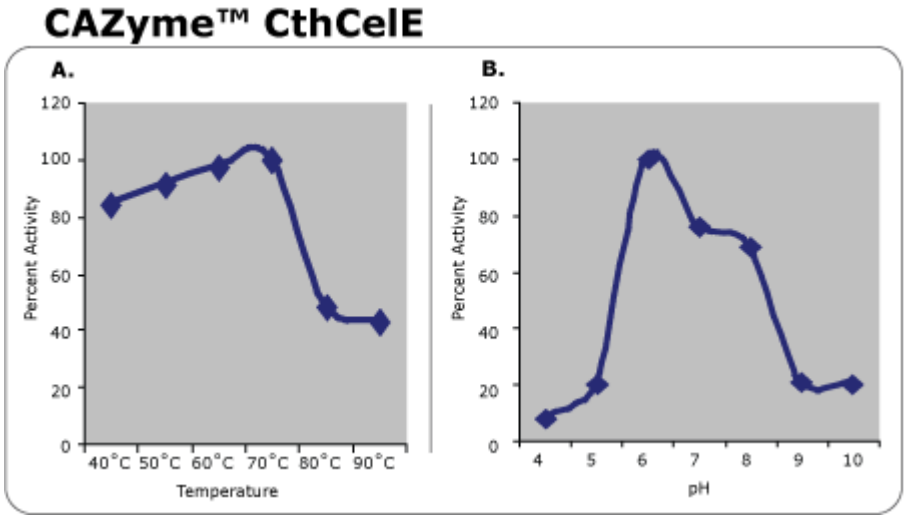


Figure 2. Temperature and pH tolerance of CAZyme CthCelE. Assay conditions available upon request.

1. Durrant, A. J., Hall, J., Hazlewood, G. P., and Gilbert, H. J. (1991) The non-catalytic C-terminal region of endoglucanase E from *Clostridium thermocellum* contains a cellulose-binding domain. *Biochem. J.* **273**, 289.