

## CAZyme™ DturCela\*

### Technical Specifications

(\*Formerly available as Cellulase 1)

Catalog No. 31551-1    2 mg (0.1 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.



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<b>Product Description</b>	CAZyme DturCela, thermostable, recombinant expressed in <i>E.coli</i> , cloned from <i>Dictyoglomus turgidum</i> . 20 mg/ml MW = 37 kDa
<b>Purity</b>	≥ 90% pure on Coomassie stained SDS-PAGE.
<b>Recommended Reaction Conditions</b>	CAZyme DturCela is active between pH 5.0 and 8.0 at 70°C.
<b>Specific Activity</b>	211 units/mg.
<b>Activity Determination</b>	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.
<b>Endoglucanase Activities</b>	CAZyme DturCela possesses <i>endo</i> -cellulase, β-glucanase activity and β-mannase activities when assayed using insoluble AZCL-linked substrates. Assay method available upon request.
<b>Exoglucanase Activities</b>	CAZyme DturCela possesses <i>exo</i> -cellulase and cellobiohydrolase activities. Assay method available upon request.
<b>Protein Concentration</b>	20 mg/ml total protein as measured using the Bradford protein assay with BSA as standard.
<b>Stability</b>	Store at 4°C. If properly stored at 4°C, this product is guaranteed for 6 months from date of purchase.
<b>Storage Buffer</b>	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

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**Length:** 312aa  
**Theoretical pI:** 5.25  
**Theoretical MW:** 37,003 Da  
**PFAM Structure:** GH5  
**Activity:** endo-cellulase  
**Typical Specific Activity:** 130-400 U/mg  
 1. Manuscript in preparation.

Figure 1. Features and sequence of recombinant CAZyme DturCela.

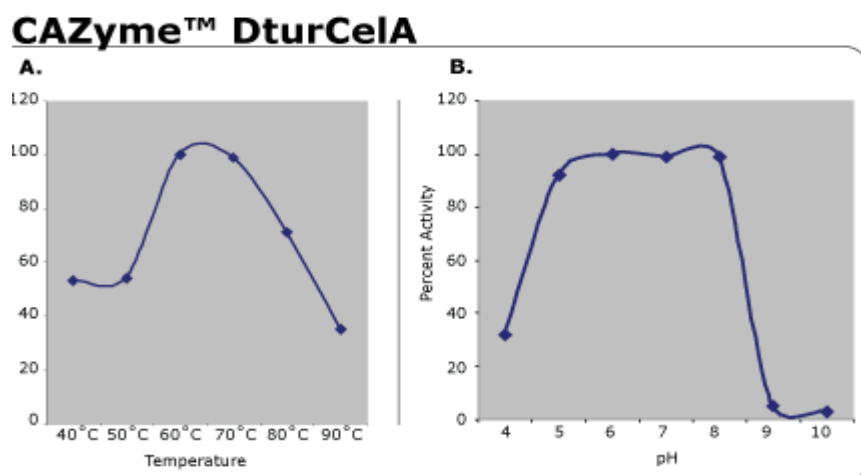


Figure 2. Temperature and pH tolerance of CAZyme DturCela. Assay conditions available upon request.