

# CAZyme™ $\alpha$ -Glucuronidase 1

## Technical Specifications



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Catalog No. 30630-1 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.

<b>Product Description</b>	CAZyme $\alpha$ -Glucuronidase 1, recombinant expressed in <i>E. coli</i> cells, MW = 80 kDa.
<b>Purity</b>	$\geq$ 90% pure on Coomassie stained SDS-PAGE.
<b>Function of <math>\alpha</math>-Glucuronidase</b>	$\alpha$ -Glucuronidase degrade $\alpha$ -1,2 glucuronyl linkages to liberate 4-O-methyl D-glucuronic acids, which exist as side chains of xylan.
<b>Recommended Reaction Conditions</b>	$\alpha$ -Glucuronidase is active from pH 7 to pH 8 at 75 to 95°C.
<b>Specific Activity</b>	2 U/mg at 70°C on NaBH <sub>4</sub> reduced Aldouronic Acids at pH 5.8; A five-fold increase in specific activity can be observed at pH 7.5.
<b>Activity Determination</b>	One $\alpha$ -Glucuronidase unit will produce 1 micromole of reducing sugar per minute at 70°C from a 1% solution of NaBH <sub>4</sub> reduced Mixed Aldouronic Acids (Tri:Tetra:Penta = 2:2:1; Megazyme, O-AMXR) in 50 mM sodium acetate at pH 5.8. Assay method available upon request.
<b>Protein Concentration</b>	10 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:** 691 aa  
**Theoretical pI:** 6.87  
**Theoretical MW:** 80,000 Da  
**PFAM Structure:** GH 67  
**Activity:**  $\alpha$ -glucuronidase  
**Typical Specific Activity:** 2 u/mg  
**Leader:** (-)  
**Dockerin:** (-)  
**Histag:** (+)  
**Esterase:** (-)

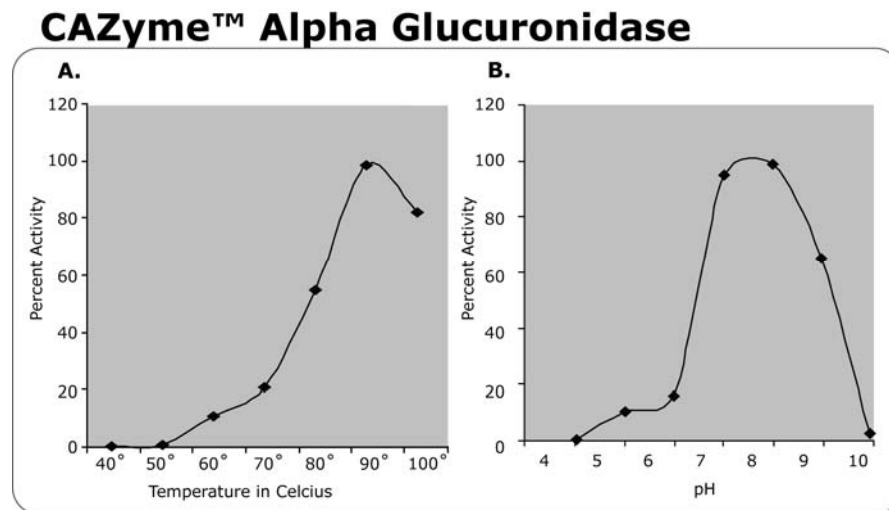


Figure 1. Temperature and pH tolerance of CAZyme  $\alpha$ -Glucuronidase 1. Assay conditions available upon request.