Creative Enzymes®

Cellulase from Cellvibrio mixtus, Recombinant

Cat. No. NATE-1200

Lot. No. (See product label)

Introduction

Description	Cellulase is any of several enzymes produced chiefly by fungi, bacteria, and protozoans that catalyze cellulolysis, the decomposition of cellulose and of some related polysaccharides; specifically, the hydrolysis of the 1,4-beta-D-glycosidic linkages in cellulose, hemicellulose, lichenin, and cereal beta-D-glucans. Cellulases break down the cellulose molecule into monosaccharides ("simple sugars") such as beta-glucose, or shorter polysaccharides and oligosaccharides. The name is also used for any naturally occurring mixture or complex of various such enzymes, that act serially or synergistically to decompose cellulosic material.
Synonyms	Cellulase, thermostable; 1,4-(1,3:1,4)-β-D-Glucan 4-glucano-hydrolase; EC 3.2.1.4; Cellulase; endo-1,4-β-D-glucanase; β-1,4-glucanase; β-1,4-endoglucan hydrolase; celluase A; cellulosin AP; endoglucanase D; alkali cellulase; cellulase A 3; celludextrinase; 9.5 cellulase; avicelase; pancellase SS

Product Information

Source	Cellvibrio mixtus ATCC 12120
Form	Supplied in 35 mM HEPES buffer, pH 7.5, containing 750 mM NaCl, 200 mM imidazole, 3.5 mM CaCl2 and 25 % (v/v) glycerol.
EC Number	EC 3.2.1.4
CAS No.	9012-54-8
Molecular Weight	33835.5 Da
Purity	> 95 % as judged by SDS-PAGE
Activity	950 U/mg
Concentration	3325 U/ml
Optimum pH	7.5 (stable from 6 – 8.5)
Optimum temperature	37°C (stable up to 45°C)
Unit Definition	One unit is defined as the amount of enzyme required to release 1μmol of glucose-reducing-sugar equivalents per minute from barley β-glucan in 50 mM Tris-HCl, pH 7.5, 5 mM CaCl2, at 37°C

Storage and Shipping Information

Storage	Store at -20°C (shipped at room temperature)