Creative Enzymes®

Cellulase 44A from Ruminococcus flavefaciens, Recombinant

Cat. No. NATE-1342

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

Species	Ruminococcus flavefaciens
Source	E. coli
Form	35 mM NaHepes buffer, pH 7.5, 750 mM NaCl, 200 mM imidazol, 3.5 mM CaCl2, 0.02% sodium azide and 25% (v/v) glycerol
EC Number	EC 3.2.1.4
CAS No.	9012-54-8
Molecular Weight	56.9 kDa
Purity	>90% by SDS-PAGE
Concentration	1 mg/mL
Optimum pH	6.8
Optimum temperature	37 °C
Specificity	Soluble forms of cellulose and xyloglucan

Storage and Shipping Information

Storage	This enzyme is shipped at room temperature but should be stored at -20 °C.