

Cellulase 5A from Ruminococcus flavefaciens, Recombinant

Cat. No. NATE-1357

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; cellulase A; cellulysin 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

44.0 kDa

Purity

>90% by SDS-PAGE

Concentration

1 mg/mL

Optimum pH

5.0–6.0

Optimum temperature

37 °C

Specificity

Acid-swollen cellulose, carboxymethylcellulose, lichenan, cellopentaose and cellotetraose

Storage and Shipping Information

Storage

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