Creative Enzymes®

Native Trichoderma sp. Cellulase

Cat. No. NATE-0119

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.
Applications	Cellulases are enzymes that hydrolyze cellulose to glucose. Cellulase is used to study the development of occupational asthma in the detergent, pharmaceutical, baking, and enzyme production industries. Cellulase is added to detergents to improve cleansing properties. Cellulase from Creative Enzymes has been used to degrade cello-oligosaccharides into glucose while investigating the biodegradability of bioabsorbable bacterial cellulose (BBC).
Synonyms	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; 1,4-(1,3; 1,4)-β-D-glucan 4-glucanohydrolase; EC 3.2.1.4

Product Information

Source	Trichoderma sp.
EC Number	EC 3.2.1.4
CAS No.	9012-54-8
Activity	> 5,000 units/g solid
Buffer	Dissolves in sterile deionized (DI) water in the presence of 0.15 polyhexamethylene biguanide (PHMB) at 3 mg/mL concentration.
Unit Definition	One unit will liberate 1.0 μmole of glucose from cellulose in one hour at pH 5.0 at 37°C (2 hr incubation time).

Storage and Shipping Information

Storage	2-8°C