Creative Enzymes®

endo-1,4-β-Xylanase from Clostridium thermocellum, Recombinant

Cat. No. NATE-1202

Lot. No. (See product label)

Introduction

Description	Xylanase is the name given to a class of enzymes which degrade the linear polysaccharide beta-1,4-xylan into xylose, thus breaking down hemicellulose, one of the major components of plant cell walls. As such, it plays a major role in micro-organisms thriving on plant sources for the degradation of plant matter into usable nutrients. Xylanases are produced by fungi, bacteria, yeast, marine algae, protozoans, snails, crustaceans, insect, seeds, etc., (mammals do not produce xylanases).
Synonyms	EC 3.2.1.8; endo-(1→4)-β-xylan 4-xylanohydrolase; endo-1,4-xylanase; xylanase; β-1,4-xylanase; endo-1,4-xylanase; endo-β-1,4-xylanase; endo-1,4-β-D-xylanase; 1,4-β-xylan xylanohydrolase; β-xylanase; β-1,4-xylan xylanohydrolase; endo-1,4-β-xylanase; β-D-xylanase; endo-1,4-β-xylanase

Product Information

Source	Clostridium thermocellum
Form	Supplied in 3.2 M ammonium sulphate
EC Number	EC 3.2.1.8
CAS No.	9025-57-4
Molecular Weight	39474.6 Da
Purity	> 95 % as judged by SDS-PAGE
Activity	2500 U/mg
Concentration	3750 U/ml
Optimum pH	6.5 (stable from 4.5 – 8.0)
Optimum temperature	65°C (stable up to 70°C)
Unit Definition	One unit is defined as the amount of enzyme required to release 1μmol of xylose-reducing-sugar equivalents per minute from xylan in phosphate-Citrate (PC) buffer (50 mM K_2HPO_4, 12 mM citric acid, pH 6.5) at 60°C.

Storage and Shipping Information

Storage	Store at 4°C (shipped at room temperature)