

## β-Mannanase from Clostridium thermocellum, Recombinant

Cat. No. NATE-1184

Lot. No. (See product label)

### Introduction

#### Description

Mannan endo-1,4-beta-mannosidase is an enzyme with system name 4-beta-D-mannan mannanohydrolase. This enzyme catalyses the following chemical reaction: Random hydrolysis of (1->4)-beta-D-mannosidic linkages in mannans, galactomannans and glucomannans.

#### Synonyms

endo-1,4-β-mannanase; endo-β-1,4-mannase; β-mannanase B; β-1, 4-mannan 4-mannanohydrolase; endo-β-mannanase; β-D-mannanase; mannan endo-1,4-β-mannosidase; 1,4-β-D-mannan mannanohydrolase; EC 3.2.1.78

### Product Information

#### Source

Clostridium thermocellum YS

#### Form

Supplied in 35 mM HEPES buffer, pH 7.5, containing 750 mM NaCl, 200 mM imidazole, 3.5 mM CaCl<sub>2</sub>, 0.02 % (w/v) sodium azide and 25% (v/v) glycerol.

#### EC Number

EC 3.2.1.78

#### CAS No.

37288-54-3

#### Molecular Weight

42700 Da

#### Purity

> 95 % as judged by SDS-PAGE

#### Activity

1500 U/mg

#### Concentration

1500 U/ml

#### Optimum pH

6.5 (stable from 6 - 8)

#### 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 mannose-reducing-sugar equivalents per minute from galactomannan in phosphate-Citrate (PC) buffer (50 mM K<sub>2</sub>HPO<sub>4</sub>, 12 mM citric acid, pH 6.5) at 60 °C.

### Storage and Shipping Information

#### Storage

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