



endo-1,4 β -MANNANASE (*Bacillus sp.*) (Lot 140901c)

Non-recombinant

E-BMABS

10/20

(EC 3.2.1.78) 4-beta-D-mannan mannanohydrolase

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single band on SDS-gel electrophoresis (MW = 30,500)
- Single major band on isoelectric focusing (pI = 4.6); minor bands at pI 4.4 & 4.8

2. SPECIFIC ACTIVITY AND LEVEL OF OTHER ACTIVITIES:

Substrate	Specific Activity (U/mg protein)
Carob galactomannan (10 mg/mL, pH 8.8, 40°C)	55
p-NP- α -galactoside	< 0.001
p-NP- β -mannoside	< 0.001
p-NP- α -glucoside	< 0.0002
CM-cellulose	< 0.0011
Xylan Beechwood	< 0.0005

One Unit of β -mannanase activity is the amount of enzyme which releases one micromole of mannose-reducing-sugar equivalents per minute from low viscosity carob galactomannan (10 mg/mL) 0.1 M glycine buffer (pH 8.8) at 40°C.

3. PHYSICOCHEMICAL PROPERTIES:

pH Optima:	8.8
pH Stability:	6.0-10.0
Temperature Optima:	65°C
Temperature Stability:	< 60°C

4. STORAGE CONDITIONS:

The enzyme is supplied as an ammonium sulphate suspension in 0.02% sodium azide and should be stored at 4°C.