



## ***endo*-1,4- $\beta$ -MANNANASE from *A. niger* (Lot 151001b)**

### **E-BMANN**

08/19

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

### **PROPERTIES**

#### **1. ELECTROPHORETIC PURITY:**

- Single band on SDS-gel electrophoresis (MW = 48,000)
- Single major band on isoelectric focusing (pI=3.6)

#### **2. SPECIFIC ACTIVITY AND LEVEL OF OTHER ACTIVITIES:**

**One Unit** of mannanase activity is defined as the amount of enzyme required to release one  $\mu$ mole of reducing sugar equivalents from the substrate employed at pH 4.0 and 40°C

Substrate	Specific Activity (U/mg protein)
Carob galactomannan (10 mg/ml, pH 4.0, 40°C)	58
CMC4M	0.066
Xylan	0.001
<i>p</i> -NP- $\alpha$ -galactoside	< 0.015
<i>p</i> -NP- $\beta$ -galactoside	< 0.001
<i>p</i> -NP- $\beta$ -xyloside	< 0.001
<i>p</i> -NP- $\beta$ -mannoside	< 0.0001
<i>p</i> -NP- $\alpha$ -glucoside	< 0.0001
<i>p</i> -NP- $\beta$ -glucoside	< 0.0001

#### **3. PHYSICOCHEMICAL PROPERTIES:**

pH Optima:	3.0
pH Stability:	3.0-8.0
Temperature Optima:	60°C
Temperature Stability:	< 70°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.