



β -GALACTOSIDASE from *Aspergillus niger* (Lot 140801a)

E-BGLAN

09/14

(EC 3.2.1.23) beta-D-galactoside galactohydrolase
CAZy GH Family 35

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single band on isoelectric focusing.

2. SPECIFIC ACTIVITY AND LEVEL OF OTHER ACTIVITIES:

Substrate	Specific Activity (U/mg Protein)
<i>p</i> -NP- β -galactoside	240.0
<i>p</i> -NP- α -galactoside	0.0002
<i>p</i> -NP- α -L-arabinofuranoside	0.50
<i>p</i> -NP- α -L-arabinopyranoside	0.17
<i>p</i> -NP- α -glucoside	0.006
<i>p</i> -NP- β -glucoside	0.001
<i>p</i> -NP- β -xyloside	0.02
<i>p</i> -NP- β -mannoside	0.002
Ceralpha (α -amylase)	0.008
Sucrose (invertase)	0.006
Maltose (maltase)	0.008

Protein concentration was determined by absorbance at 280 nm.

3. PHYSICOCHEMICAL PROPERTIES:

pH Optima:	4.5
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.

For the assay, enzyme preparation is diluted in 0.1M sodium acetate buffer pH 4.5 containing BSA (0.5 mg/mL). If BSA is excluded from the buffer lower activities are obtained.

The concentration of enzyme as supplied is approximately 4,000 U/mL.