β-Glucosidase (Aspergillus niger)

Non-recombinant

E-BGLUC

EC: 3.2.1.21

Synonyms: beta-glucosidase; beta-D-glucoside glucohydrolase

CAZy Family: GH3

CAS: 9001-22-3

Refer to the product lot number Certificate of Analysis for lot specific properties.

PROPERTIES

1. ELECTROPHORETIC PURITY:
   - Single band on SDS-gel electrophoresis (MW ~ 121,000)
   - One major band on isoelectric focusing (pI ~ 4.0)

2. SPECIFICITY:
   Hydrolysis of terminal, non-reducing β-D-glucosyl residues with release of β-D-glucose.

3. PHYSICOCHEMICAL PROPERTIES:
   Recommended conditions of use are at pH 4.0-5.0 and up to 60°C
   pH Optima: 4.0
   pH Stability: 3.0-9.0 (> 75% control activity after 24 h at 4°C)
   Temperature Optima: 70°C (10 min reaction)
   Temperature Stability: up to 60°C (> 75% control activity after 15 min incubation at temperature

4. STORAGE CONDITIONS:
   The enzyme is supplied as an ammonium sulphate suspension containing 0.02% (w/v) sodium azide and should be stored at 4°C. For assay, this enzyme should be diluted in sodium acetate buffer (100 mM), pH 4.0 containing 1 mg/mL BSA. Swirl to mix the enzyme immediately prior to use.
5. EXPERIMENTAL DATA:

- **pH Optima**
  - Graph showing relative activity (%) vs. pH.

- **pH Stability**
  - Graph showing relative activity (%) vs. pH.

- **Thermal Optima**
  - Graph showing relative activity (%) vs. Temperature (°C).

- **Thermal Stability**
  - Graph showing relative activity (%) vs. Temperature (°C).