β-N-ACETYLHEXOSAMINIDASE (Prokaryote) (Lot 150101b)

Recombinant
E-BNAHP 03/19
(EC 3.2.1.52) β-N-acetyl-D-hexosaminidase; N-acetylhexosaminohydrolase
CAZy Family: GH20
CAS: 9012-33-3

PROPERTIES
1. ELECTROPHORETIC PURITY:
   - Single band on SDS-gel electrophoresis (MW ~ 52,000)
   - One major band on isoelectric focusing (pI ~ 6.3)

2. SPECIFIC ACTIVITY:
   260 U/mg protein (on pNP-β-D-N-acetylglucosamine) at pH 4.0 and 40°C;
   ~ 723 U/mg protein (on pNP-β-D-N-acetylglucosamine) at pH 4.0 and 60°C.

   One Unit of β-N-acetyl-D-hexosaminidase activity is defined as the amount of enzyme required to release one μmole of p-nitrophenol per minute from pNP-β-D-N-acetylglucosamine (1 mM) in citrate-phosphate buffer (100 mM) pH 4.0 at the temperatures indicated, monitored at 400 nm.

3. SPECIFICITY:
   Hydrolysis of terminal non-reducing N-acetyl-D-hexosamine residues in N-acetyl-β-D-hexosaminides from glycoproteins and oligosaccharides.

4. PHYSICOCHEMICAL PROPERTIES:
   Recommended conditions of use are at pH 3.0-5.0 and up to 60°C
   pH Optima: 4.0
   pH Stability: 3.0-9.0 (> 75% control activity after 24 hours at 4°C)
   Temperature Optima: 60°C (10 min. reaction)
   Temperature Stability: up to 50°C

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

**pH Optima**

![Graph showing pH Optima](image)

**pH Stability**

![Graph showing pH Stability](image)

**Thermal Optima**

![Graph showing Thermal Optima](image)

**Thermal Stability**

![Graph showing Thermal Stability](image)