**β-N-ACETYLHEXOSAMINIDASE (microbial) (Lot 120601c)**

**Recombinant**

E-BNAHEX 05/20

(EC 3.2.1.52) β-N-acetyl-D-hexosaminidase N-acetylhexosaminohydrolase

CAZy Family: GH3

**PROPERTIES**

1. **ELECTROPHORETIC PURITY:**
   - Single band on SDS-gel electrophoresis (MW ~ 52,400)
   - Single major band on isoelectric focusing (pI ~ 5.7)

2. **SPECIFIC ACTIVITY:**
   1.4 U/mg protein (on pNP-β-D-N-acetylglucosamine) at pH 7.5 and 37°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 TRIS.HCl buffer (100 mM) pH 7.5 and 37°C, monitored at 410 nm.

   * Extinction coefficient (ε ) of p-nitrophenol = 11418 M⁻¹ x cm⁻¹

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:**
   pH Optima: 6.0-8.0

5. **STORAGE CONDITIONS:**
   The enzyme is supplied as a lyophilised powder and should be stored at -20°C. For assay, this enzyme should be diluted appropriately in distilled water immediately prior to use.

   **Stability:**
   Lyophilised powder: > 4 years below -10°C
   Reconstituted enzyme: > 6 months at 4°C or > 2 years below -10°C