

Recombinant Mouse β -NGF/NGFB Protein

Catalog Number: PKSM041188

Note: Centrifuge before opening to ensure complete recovery of vial contents.

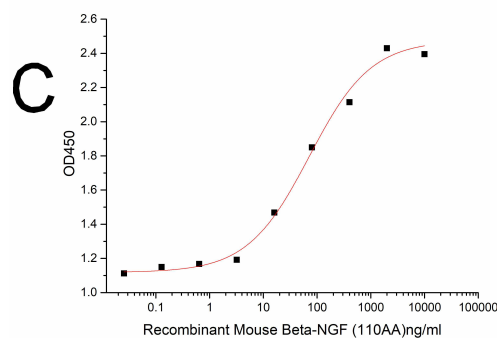
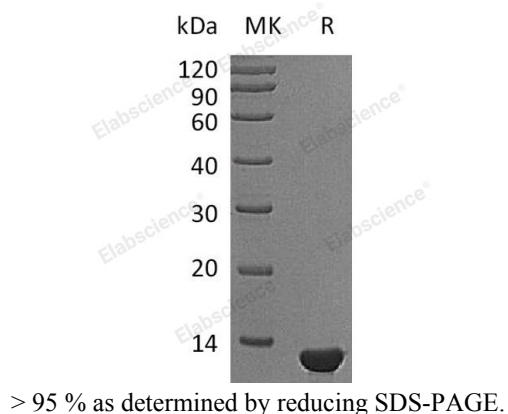
Description

| | |
|----------------------|---|
| Species | Mouse |
| Source | E.coli-derived Mouse β -NGF/NGFB protein Met130-Arg239 |
| Calculated MW | 12.4 kDa |
| Observed MW | 13 kDa |
| Accession | P01139 |
| Bio-activity | Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED ₅₀ for this effect is 68.52 ng/ml. |

Properties

| | |
|-----------------------|--|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per μ g of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from a 0.2 μ m filtered solution of 20mM PB, 200mM NaCl, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. |
| | Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED₅₀ for this effect is 68.52 ng/ml.

Background

NGF is the first member discovered in the Neurotrophin family, which includes brain-derived neurotrophic factor (BDNF), neurotrophin-3 (NT-3), and neurotrophin-4 (NT-4). These proteins belong to the cysteine-knot family of growth factors that assume stable dimeric structures. Mouse beta -NGF is a homodimer of two 120 amino acid polypeptides. It shares approximately 90% homology at the amino acid level with human beta -NGF and 95.8% with rat beta -NGF. NGF signaling has been shown to play an important role in neuroprotection and repair. β -NGF acts as a growth and differentiation factor for B lymphocytes, and enhances B-cell survival. It is a potent neurotrophic factor that signals through its receptor β -NGFR, and plays a crucial role in the development and preservation of the sensory and sympathetic nervous systems.