

Recombinant Mouse Beta-NGF (110AA)

Catalog#:AC13153 Derived from *E.coli*

DESCRIPTION	Recombinant Mouse Beta-Nerve Growth Factor is produced by our E.coli expression system and the target gene encoding Met130-Arg239 is expressed. Accession#: P01139 Known as: Beta-Nerve Growth Factor; Beta-NGF; NGF; NGFB
FORMULATION	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 200mM NaCl, pH 8.0.
SHIPPING	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
STORAGE	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
RECONSTITUTION	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
QUALITY CONTROL	Bioactivity: Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 0.5-1.5 ng/ml. Mol Mass: 12.4kDa AP Mol Mass: 12kDa, reducing conditions. Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
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 cysteineknot 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.
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