Ngf
Recombinant Mouse Nerve Growth Factor beta

Catalog No.	CRN006A	**Quantity:**	5 µg
	CRN006B		20 µg
	CRN006C		1 mg
	CRN006D		100 µg

Alternative Names: Ngfb, beta-NGF

Description Nerve Growth Factor (NGF-beta) is a neurotrophic factor related to BDNF, NT-3 and NT -4 and is involved in the development and maintenance of the sensory and sympathetic nervous systems. β-NGF signals through the low affinity nerve growth factor receptor (LNGFR) and the tropomyosin receptor kinase A (TrkA) to activate PI3K, Ras, and PLC signaling pathways. β-NGF is also involved in the growth, differentiation, and survival of B lymphocytes. Human, mouse, and rat β-NGF proteins are cross-reactive.

Gene ID: 18049

UniProt ID: P01139

Source: *E. coli*

Molecular Weight: 13.6 kDa/27.2 kDa (121/242 amino acids) noncovalent homodimer

Formulation: Lyophilized from a sterile filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)

Purity: ≥95% determined by reducing and non-reducing SDS-PAGE

Endotoxin Level: ≤ 1 EU/µg by kinetic LAL analysis.

Biological Activity: $ED_{50} \leq 5$ ng/ml, determined by dose-dependent proliferation of TF-1 cells.

Specific Activity: $\geq 2.0 \times 10^5$ Units/mg

Amino Acid Sequence: MSSTHPVFHM GEFSVCDSVS VWVGDKTTAT DIKGKEVTVL AEVNINNSVF RQYFFETKCR ASNPVESGCR GIDSKHWNSY CTTTHTFVKA LTTDEKQAAW RFIRIDTACV CVLSRKATRR G

Reconstitution: **Centrifuge vial prior to opening**. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Storage & Stability: Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.
Avoid repeated freeze-thaw cycles.

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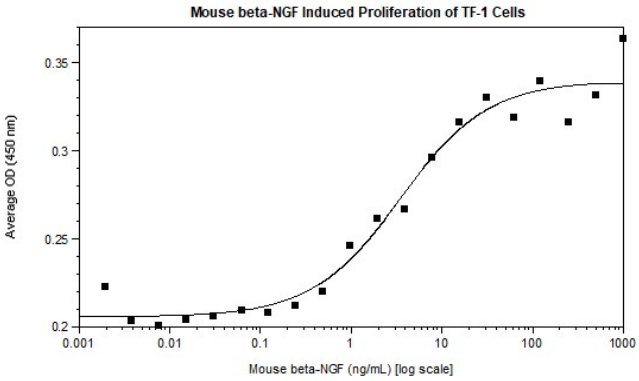

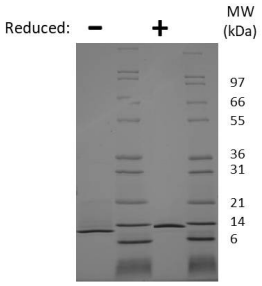

Mouse beta-NGF Gel

Figure: 1 ug run under (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Mouse beta-NGF is a noncovalent homodimer and therefore has a predicted MW of 13.6 kDa when run under both reducing and non-reducing conditions.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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