

Datasheet for 010-001-W03-0100**rMouse NGF beta Protein****Overview**

Description:	Mouse Nerve Growth Factor beta Recombinant Protein - 010-001-W03-0100
Item No.:	010-001-W03-0100
Size:	100 µg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Mouse
Expressed in:	E. coli

Product Details

Background:	Nerve Growth Factor (NGF-β) is a neurotrophic factor related to BDNF, NT-3 and NT-4. NGF-β acts through its receptor β-NGFR, and is involved in the development and maintenance of the sensory and sympathetic nervous systems. NGF-β also is also involved in the growth, differentiation and survival of B lymphocytes. Human, mouse and rat proteins show cross-reactivity. Recombinant mouse NGF-β is a non-glycosylated, non-covalently linked homodimer, containing two 120 amino acid chains , with a molecular weight of 13.5 kDa each.
Synonyms:	beta-NGF
Species of Origin:	Mouse
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	Ngf
Purity/Specificity:	Nerve Growth Factor beta purity was determined to be greater than 95% as determined by HPLC, analysis by UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-PAGE.
Relevant Links:	• UniProtKB - Q6LDU8

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Nerve Growth Factor beta Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Nerve Growth Factor beta in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein. Biologic Activity: The activity as determined by the proliferation of TF-1 cells and is typically less than 1 ng/mL.

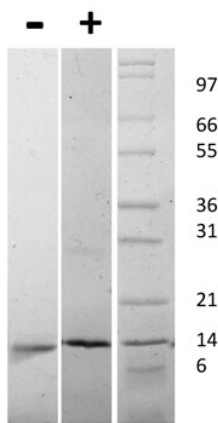
Formulation

Physical State:	Lyophilized
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	100 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Images

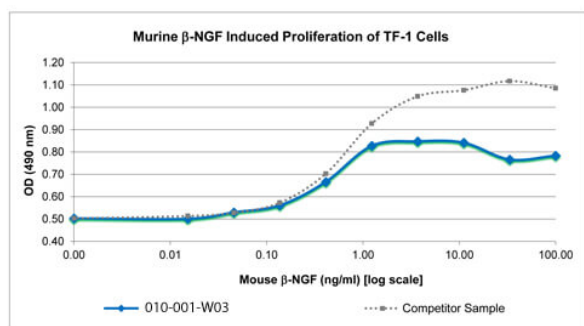


SDS-PAGE

SDS-PAGE of Mouse Nerve Growth Factor beta Recombinant Protein. Lane 1: 1 μ g Mouse NGF beta in non-reducing conditions (-). Lane 2: 1 μ g Mouse NGF beta in reducing conditions (+). Lane 3: Molecular weight marker. Mouse NGF-beta is a homodimer with a predicted MW totaling 13.5 kDa.

SDS-PAGE

Bioactivity of Mouse Nerve Growth Factor beta Recombinant Protein. Serial dilutions of Mouse β NGF, starting at 100 ng/mL, were added to TF-1 cells growing in GM-SCF free media. Cell proliferation was measured after 63 hours and the linear portion of the curve was used to calculate the ED50. The ED50 of Mouse NGF is between 0.3-0.4 ng/mL. This value is comparable to the typical expected range of less than 1 ng/mL.



Disclaimer

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