

GFH38AF Recombinant Human NGF- β (Animal-Free)

Description

Nerve Growth Factor β (NGF- β) is a neurotrophic factor that is important for the development and maintenance of sensory and sympathetic neurons. NGF- β 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. NGF- β is also involved in the growth, differentiation, and survival of B lymphocytes. Human, mouse, and rat NGF- β proteins are cross-reactive.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

Length	121 / 242 aa
Molecular Weight	13.6 / 27.3 kDa
Source	E. coli
Accession Number	P01138
Purity	$\geq 95\%$ determined by reducing and non-reducing SDS-PAGE

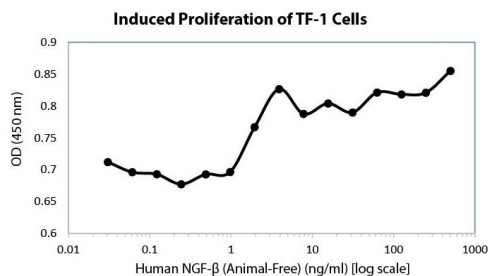
Specifications

Alternative Names	Migration Inhibitory Factor, GIF, phenylpyruvate tautomerase, glycosylation-inhibiting factor, L-dopachrome tautomerase
Biological Activity	Human NGF- β (Animal-Free) is fully biologically active when compared to standard. The activity is determined by the ability to induce TF-1 cells proliferation and it is typically less than 5 ng/ml. This corresponds to an expected specific activity of 2×10^5 units/mg.
Endotoxin Level	≤ 1.00 EU/ μ g as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
AA Sequence	MSSSHPIFHRG EFSVCDSVSV WVGDKTTATD IKGKEVMVLG EVNINNSVFK QYFFETKCRD PNPVDSGCRG IDSKHWNSYC TTTHTFVKAL TMDGKQAARW FIRIDTACVC VLSRKAVRRA

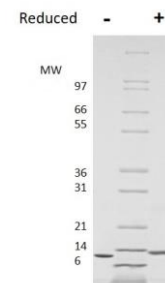
Preparation and Storage

Reconstitution	Centrifuge vial before 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 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



Induced proliferation of TF-1 cells assay for Human NGF- β . Cell proliferation was measured to calculate the ED50, which is as expected less than 5 ng/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μ g of protein was loaded in each lane. Human NGF- β has a predicted Mw of 27.3 kDa (each monomer is 13.6 kDa).