Active Recombinant Human NGF(Arg 121 Gly) protein

Cat. No. NGF-589H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding the human NGF (NP_002497.2, with mutation Arg 121 Gly) (Met1-Ala241) was expressed.
Species	Human
Source	HEK293
ProteinLength	Met1-Ala241
Description	Nerve growth factor (NGF) is important for the development and maintenance of the sympathetic and sensory nervous systems. NGF protein was identified as a large complex consisting of three non-covalently linked subunits, α, β, and γ, among which, the β subunit, called β-NGF (beta-NGF), was demonstrated to exhibits the growth stimulating activity of NGF protein. NGFB/beta-NGF gene is a member of the NGF-beta family and encodes a secreted protein which homodimerizes and is incorporated into a larger complex. NGF protein acts via at least two receptors on the surface of cells (TrkA and p75 receptors) to regulate neuronal survival, promote neurite outgrowth, and up-regulate certain neuronal functions such as mediation of pain and inflammation. In addition, previous studies indicated that NGF may also have an important role in the regulation of the immune system.
Predicted N Terminal	Glu 19
Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

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Bio-activity	Testing in progress
Molecular Mass	The recombinant human NGF consists of 223 amino acids and predicts a molecular mass of 24.8 kDa.
Endotoxin	< 1.0 EU per μg protein as determined by the LAL method.
Purity	> 95 % as determined by SDS-PAGE.
Stability	Samples are stable for up to twelve months from date of receipt at -20°C to -80°C
Storage	Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4℃ before opening to recover the entire contents.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name	NGF nerve growth factor [Homo sapiens (human)]
Official Symbol	NGF
Synonyms	Beta-NGF; HSAN5; NGFB
Gene ID	4803

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mRNA Refseq	NM_002506.3
Protein Refseq	NP_002497.2
MIM	162030
UniProt ID	P01138

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