Human NGF / NGFB Protein

Catalog Number: 11050-HNAH

General Information

Gene Name Synonym:
Beta-NGF; HSAN5; NGFB

Protein Construction:
A DNA sequence encoding the human NGF (NP_002497.2, with mutation Arg 121 Gly) (Met1-Ala241) was expressed.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE.

Endotoxin:
< 1.0 EU per μg protein as determined by the LAL method.

Stability:
Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Glu 19

Molecular Mass:
The recombinant human NGF consists of 223 amino acids and predicts a molecular mass of 24.8 kDa.

Formulation:
Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:
Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:

Protein 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.

References