

Recombinant Human Beta-NGF

Cat No:HR2R1192

For research use only

Overview

Quantity	20 ?g
Gene Symbol	NGF
Gene ID	4803
Accession	P01138
Alternative Name	NGF, NGFB Recombinant Human NGF
Species	Human
Source	CHO cells
Description	<p>NGF is mainly responsible for the survival and the differentiation and the functional activities of sensory and sympathetic neurons in the peripheral nervous system. It also plays an important role in the development and functional activities of cholinergic neurons in the central nervous system. Since NGF is synthesized also in non-neuronal tissues it may have a much wider spectrum of biological activities than thought previously. NGF stimulates chemotactic migration of human polymorphonuclear leukocytes in vitro. NGF stimulates the growth and differentiation of B cells and the growth of T cells and of some tumor cell types. NGF inhibits immunoglobulin production by various human plasma cell. The cytokines IL-1, IL-6, and bFGF are potent inducers of NGF. NGF induces the synthesis of IL-1 in pheochromocytoma cells which in turn acts as a growth factor for glial cells and induces the synthesis of NGF following nerve injuries. In thymic stromal cells NGF induces the synthesis of IL-6. NGF induces the synthesis of the fos oncogene and the myc oncogene and also influences the expression of EGF. One receptor that is responsible for mediating most of the activities of NGF is expressed preferentially in neuronal tissues. This glycoprotein of 140 kDa is the product of the trk gene. It possesses an intrinsic tyrosine-specific protein kinase in its intracellular domain.</p>
Functions	The ED(50) was determined by the determined by its ability to proliferate TF-1 cells and was found to be in the range of 0.5 ng/mL.
Formulation	NGF-beta was lyophilized from a 0.2 ?m filtered solution in 20 mM sodium acetate, 150 mM NaCl, pH 5.5.
Solubility	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Appearance	Lyophilized Powder
Molecular Weight	27
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method.

Shipping Condition	Ambient Temperature
Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70°C. Upon reconstitution, this cytokine can be stored in working aliquots at 2° - 8°C for one month, or at -20°C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

