Recombinant Human Beta-NGF

Catalog No.: RP0066

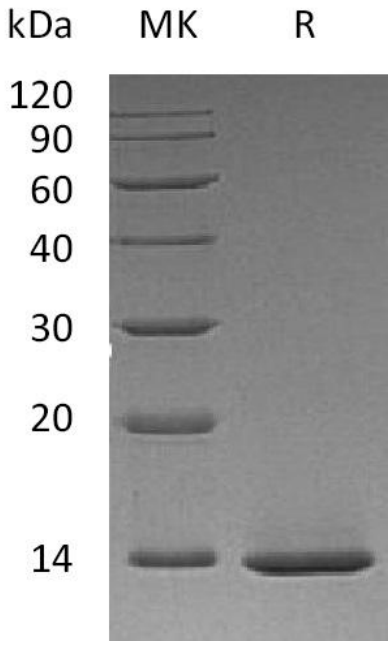
Basic Information

Information	
Source	*E.coli*
Description	Recombinant Human Beta-Nerve Growth Factor is produced by our E.coli expression system and the target gene encoding Ser122-Ala241 is expressed.
Accession	P01138
Known As	Beta-Nerve Growth Factor; Beta-NGF; NGF; NGFB;β-NGF
Predicted Mol Mass	13.4 KDa
Apparent Mol Mass	14 KDa, reducing conditions

Properties	
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 0.01 EU/μg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening.Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

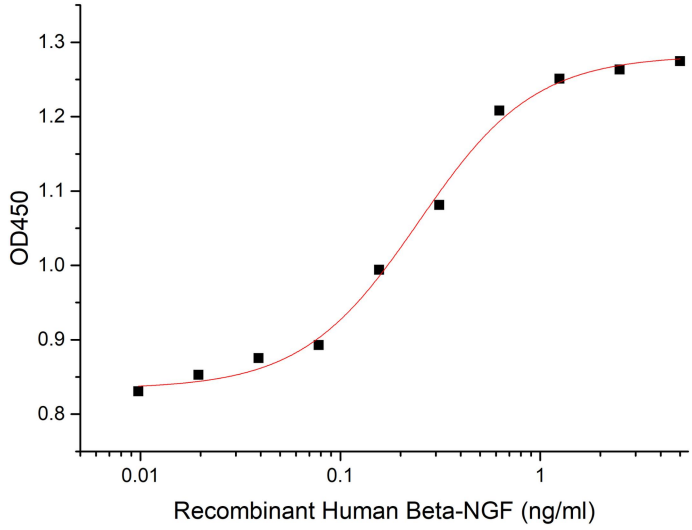
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay



Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 0.03-0.3 ng/ml. (QC verified)

Background

Human β-Nerve Growth Factor (β-NGF) was initially isolated in the mouse submandibular gland. It is composed of three non-covalently linked subunits α, β, and γ; it exhibits all the biological activities ascribed to NGF. It is structurally related to BDNF, NT-3 and NT-4 and belongs to the cysteine-knot family of growth factors that assume stable dimeric structures. B-NGF is a neurotrophic factor that signals through its receptor β-NGF, and plays a crucial role in the development and preservation of the sensory and sympathetic nervous systems. B-NGF also acts as a growth and differentiation factor for B lymphocytes and enhances B-cell survival. These results suggest that β-NGF is a pleiotropic cytokine, which in addition to its neurotropic activities may have an important role in the regulation of the immune system. Human β-NGF shares 90% sequence similarity with mouse protein and shows cross-species reactivity.