Active Nerve Growth Factor (NGF)

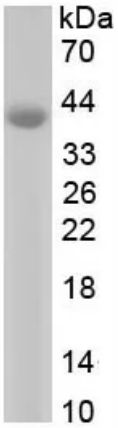
Catalog#:PHH12185

概述（Summary）

别称（Alternative Names）	NGFB; Beta-NGF; HSAN5; NGF-B; Beta-Nerve Growth Factor
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Glu19-Arg239】
Accession #	P01138
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	26.3 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Nerve growth factor is important for the development and maintenance of the sympathetic and sensory nervous systems. Extracellular ligand for the NTRK1 and NGFR receptors, activates cellular signaling cascades to regulate neuronal proliferation, differentiation and survival (Probable). The immature NGF precursor (proNGF) functions as ligand for the heterodimeric receptor formed by SORCS2 and NGFR, and activates cellular signaling cascades that lead to inactivation of RAC1 and/or RAC2, reorganization of the actin cytoskeleton and neuronal growth cone collapse. In contrast to mature NGF, the precursor form (proNGF) promotes neuronal apoptosis (in vitro). Inhibits metalloproteinase-dependent

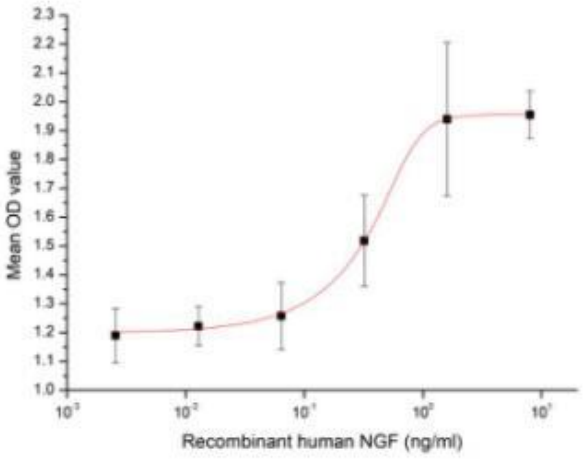
proteolysis of platelet glycoprotein VI. Binds lysophosphatidylinositol and lysophosphatidylserine between the two chains of the homodimer. The lipid-bound form promotes histamine relase from mast cells, contrary to the lipid-free form.

电泳图（SDS-PAGE image）

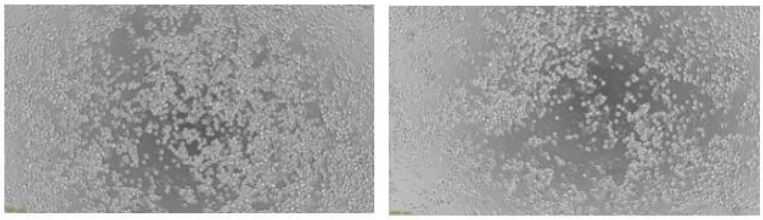


Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



Nerve growth factor (NGF) is a neurotrophic factor and neuropeptide primarily involved in the regulation of growth, maintenance, proliferation, and survival of certain target neurons. To test the effect of NGF on cell proliferation, TF-1 cells were seeded into triplicate wells of 96-well plates at a density of 20,000 cells/well with various concentrations of recombinant human NGF. After incubated for 72 hours, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8(CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Proliferation of TF-1 cells after incubation with NGF for 72 hours observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant human NGF for 72 hours. The result was shown in Figure 2. It was obvious that recombinant human NGF significantly increased cell viability of TF-1 cells, the EC50 was 0.38 ng/ml. Figure 2. Cell proliferation of TF-1 cells after stimulated with recombinant human NGF.



A B

Figure 1. Cell proliferation of TF-1 cells after stimulated with recombinant human NGF.
(A) TF-1 cells cultured in 1640, stimulated with 8 ng/ml NGF for 72 hours;
(B) Unstimulated TF-1 cells cultured in 1640 for 72 hours.

注意事项（Note）

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