abcam

Product datasheet

Recombinant human NGF protein (Active) ab9796

1 Image

Description

Product name	Recombinant human NGF protein (Active)
Biological activity	Determined by the dose-dependent stimulation of the proliferation of human TF-1 cells. The expected ED_{50} is ≤ 1.0 ng/ml, corresponding to a specific activity of ≥ 1 x 10^6 units/mg.
Purity	>= 98 % SDS-PAGE. >=98% HPLC analyses. Sterile filtered.
Endotoxin level	< 1.000 Eu/µg
Expression system	Escherichia coli
Accession	**P01138**
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	SSSHPIFHRG EFSVCDSVSV WVGDKTTATD IKGKEVMVLG EVNINNSVFK QYFFETKCRD PNPVDSGCRG IDSKHWNSYC TTTHTFVKAL TMDGKQAAWR FIRIDTACVC VLSRKAVRRA SSSHPIFHRG EFSVCDSVSV WVGDKTTATD IKGKEVMVLG EVNINNSVFK QYFFETKCRD PNPVDSGCRG IDSKHWNSYC TTTHTFVKAL TMDGKQAAWR FIRIDTACVC VLSRKAVRRA
Predicted molecular weight	27 kDa
Amino acids	122 to 241
Additional sequence information	Full length mature protein, without the signal peptide or the propeptide. The functional form is a non-covalently linked homodimer 27 kDa.

Specifications

Our **Abpromise guarantee** covers the use of **ab9796** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	HPLC Functional Studies

	SDS-PAGE
Form	Lyophilized

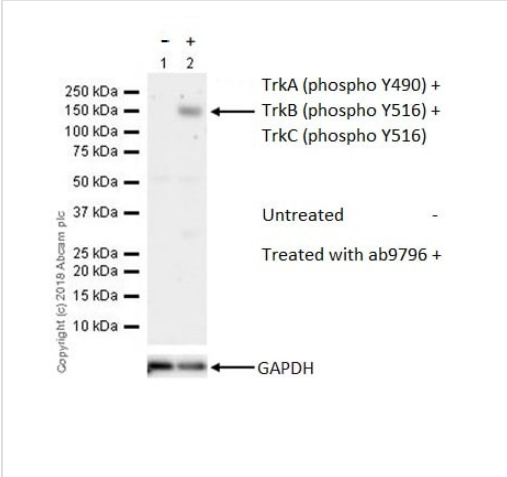
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. This product is an active protein and may elicit a biological response in vivo, handle with caution.
Reconstitution	Please reconstitute this product to 0.1-1 mg/ml in water. Follow reconstitution with further dilution in a buffer containing a carrier protein (example 0.1% BSA) for long term storage.

General Info

Function	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 through those receptor tyrosine kinase to regulate neuronal proliferation, differentiation and survival. Inhibits metalloproteinase dependent proteolysis of platelet glycoprotein VI (PubMed:20164177).
Involvement in disease	Neuropathy, hereditary sensory and autonomic, 5
Sequence similarities	Belongs to the NGF-beta family.
Cellular localization	Secreted.

Images



Western blot - Recombinant human NGF protein (ab9796)

All lanes : Anti-TrkA (phospho Y496) + TrkB (phospho Y516) + TrkC (phospho Y516) antibody [EPR19140] (**ab197071**) at 1/1000 dilution

Lane 1 : Untreated PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate
Lane 2 : PC-12 treated with 100 ng/mL NGF (ab9796) for 5 minutes, whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Observed band size: 140 kDa

Exposure time: 3 minutes

Blocking and dilution buffer: 5% NFDM/TBST.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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