

Nerve Growth Factor (NGF) Active Protein | NGF active protein

Active Nerve Growth Factor (NGF)

CATALOG # AAA146613	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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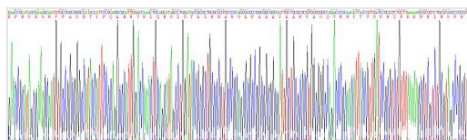
PRODUCT SYNONYMS

Nerve Growth Factor (NGF); Active Nerve Growth Factor (NGF); NGFB; Beta-NGF; HSN5; NGF-B; Beta-Nerve Growth Factor; NGF active protein

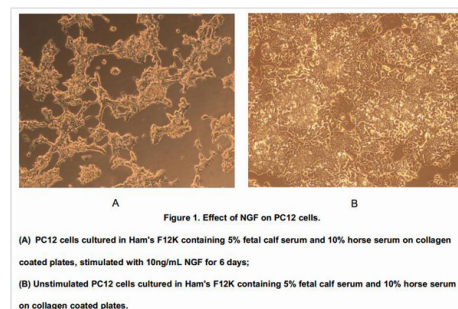
PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	> 97%
Form/Format	Freeze-dried powder
Sequence Length	444
Applicable Applications for NGF active protein	Activity Assay, Cell Culture
Fragment	Glu19~Arg239
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Organism Species	Human
Isoelectric Point	10.1
Usage	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

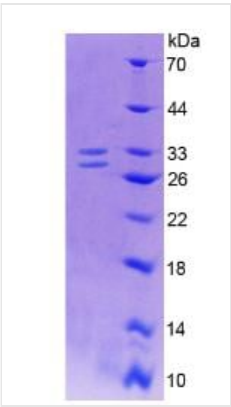
IMAGES



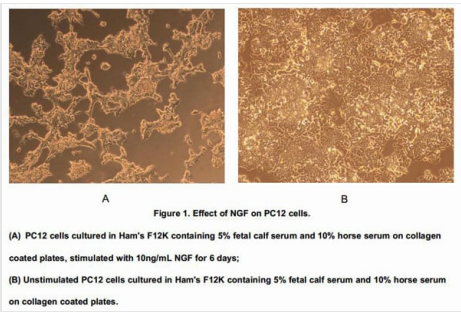
Application Data



Application Data



SDS-PAGE



Activity

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. As reported, when the pheochromocytoma cell line PC12 is exposed to nerve growth factor (NGF), the cells respond over a period of a week by ceasing cell division and extending neurites (Greene and Tischler, 1976). The cells were grown in Ham's F12K containing 5% fetal calf serum and 10% horse serum on polylysine or collagen coated plates. When cells reached log phase growth , fresh medium was added together with 10ng/mL of NGF, then cells were observed by inverted microscope everyday.Cell division ceasing and differentiation of PC12 cells after incubation with NGF (10ng/mL) for 6 days was shown in Figure1.Control group which received no NGF displayed no neurite outgrowth and cells multiply rapidly.

ADDITIONAL INFORMATION

Product Categories/Family for NGF active protein	Active Protein
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NCBI AND UNIPROT INFORMATION

NCBI GI #	751247063
NCBI GeneID	4317
NCBI Accession #	NP_001291370.1
NCBI GenBank Nucleotide #	NM_001304441.1
UniProt Accession #	P22894; Q45F99
Molecular Weight	29.2kDa; 30/33kDa
NCBI Official Full Name	neutrophil collagenase isoform 2
NCBI Official Synonym Full Names	matrix metalloproteinase 8
NCBI Official Symbol	MMP8
NCBI Official Synonym Symbols	HNC; CLG1; MMP-8; PMNL-CL
NCBI Protein Information	neutrophil collagenase
UniProt Protein Name	Neutrophil collagenase
UniProt Gene Name	MMP8
UniProt Synonym Gene Names	CLG1; MMP-8; PMNL-CL

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.