

Anti-NGF/Beta Ngf Rabbit Monoclonal Antibody

Catalog # ABO13233

Product Information

Application	WB, IHC, IF, ICC
Primary Accession	P01138
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-NGF/Beta Ngf Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	4803
Other Names	Beta-nerve growth factor, Beta-NGF, NGF, NGFB
Calculated MW	26959
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200
Subcellular Localization	Secreted.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: BDE-14
Immunogen	A synthesized peptide derived from human NGF
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	NGF
Synonyms	NGFB

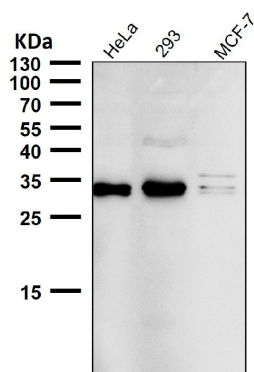
Function

Nerve growth factor is important for the development and maintenance of the sympathetic and sensory nervous systems (PubMed:[14976160](#), PubMed:[20978020](#)). Extracellular ligand for the NTRK1 and NGFR receptors, activates cellular signaling cascades to regulate neuronal proliferation, differentiation and survival (Probable) (PubMed:[20978020](#)). The immature NGF precursor (proNGF) functions as a 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) (By similarity). Inhibits metalloproteinase-dependent proteolysis of platelet glycoprotein VI (PubMed:[20164177](#)). Binds lysophosphatidylinositol and lysophosphatidylserine between the two chains of the homodimer. The lipid-bound form promotes histamine release from mast cells, contrary to the lipid-free form (By similarity).

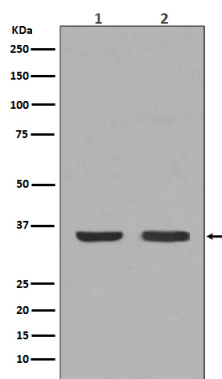
Cellular Location

Secreted. Endosome lumen {ECO:0000250|UniProtKB:P01139}. Note=ProNGF is endocytosed after binding to the cell surface receptor formed by SORT1 and NGFR {ECO:0000250|UniProtKB:P01139}

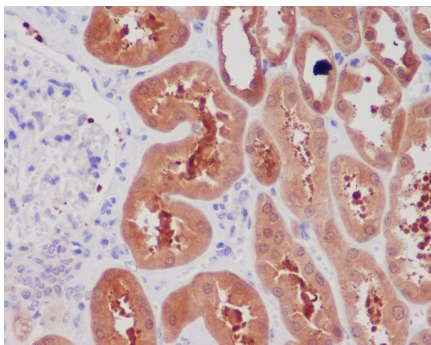
Images



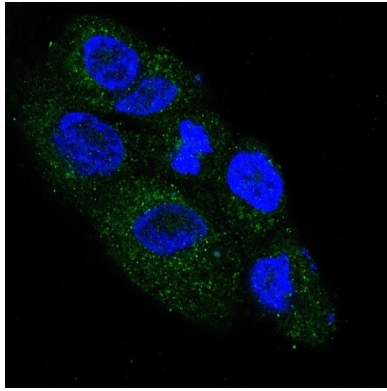
All lanes use the Antibody at 1:500 dilution for 1 hour at room temperature.



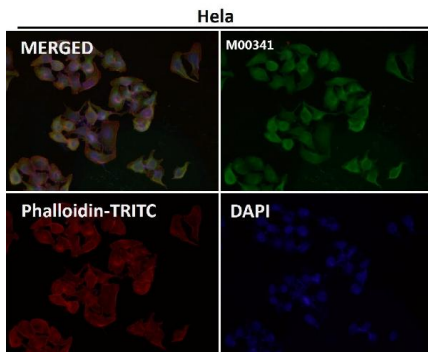
Western blot analysis of NGF expression in (1)Mouse thyroid lysate;(2) HeLa cell lysate.



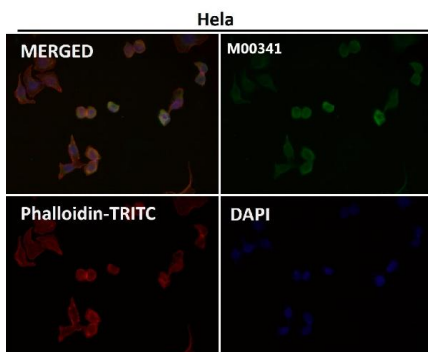
Immunohistochemical analysis of paraffin-embedded human kidney, using NGF Antibody.



Immunofluorescent analysis of SH-SY5Y cells, using NGF Antibody.



Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis using the Antibody at 1:150 dilution.

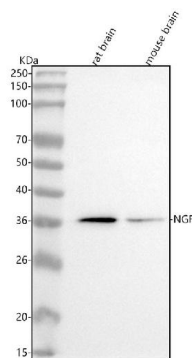


Figure 1. Western blot analysis of NGF using anti-NGF antibody (M00341).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NGF antigen affinity purified monoclonal antibody (Catalog # M00341) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for NGF at approximately 35 kDa. The expected band size for NGF is at 27 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.