

### Anti-NGF/NGF beta Antibody

**Catalog # ABO12710** 

### **Specification**

# **Anti-NGF/NGF beta Antibody - Product Information**

Application WB
Primary Accession P01138
Host Rabbit
Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Beta-nerve growth factor(NGF) detection. Tested with WB, ELISA in Human.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-NGF/NGF beta Antibody - Additional Information

**Gene ID 4803** 

**Other Names** 

Beta-nerve growth factor, Beta-NGF, NGF, NGFB

Calculated MW 26959 MW KDa

**Application Details** 

Western blot, 0.1-0.5 μg/ml, Human, -<br/>br>ELISA , 0.1-0.5 μg/ml, Human<br/>br>

**Subcellular Localization** 

Secreted.

**Protein Name** 

Beta-nerve growth factor

## **Contents**

Each vial contains 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. Carrier free (No BSA) form available in stock. If you want this antibody carrier free please specify Carrier Free" or "No BSA" in your order note. "

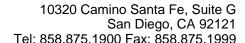
#### **Immunogen**

E. coli-derived human NGFB recombinant protein(Position: S122-A241).

#### **Purification**

Immunogen affinity purified.

**Cross Reactivity** 





No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities**Belongs to the NGF-beta family.

## **Anti-NGF/NGF beta Antibody - 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:<a href="http://www.uniprot.org/citations/14976160" target="\_blank">14976160</a>, PubMed:<a href="http://www.uniprot.org/citations/20978020" target="\_blank">20978020</a>). Extracellular ligand for the NTRK1 and NGFR receptors, activates cellular signaling cascades to regulate neuronal proliferation, differentiation and survival (PubMed:<a href="http://www.uniprot.org/citations/20978020" target="\_blank">20978020</a>) (Probable). 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:<a href="http://www.uniprot.org/citations/20164177" target="\_blank">20164177</a>). 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 (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}

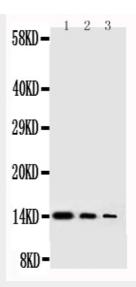
# Anti-NGF/NGF beta Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Anti-NGF/NGF beta Antibody - Images





Anti-human NGF antibody, ABO12710, Western blottingLane 1: Recombinant Human NGFB Protein 10ngLane 2: Recombinant Human NGFB Protein 2

# Anti-NGF/NGF beta Antibody - Background

Nerve growth factor is a polypeptide involved in the regulation of growth and differentiation of sympathetic and certain sensory neurons. the nucleotide sequence of human and mouse beta-NGF are very similar. the beta-subunits of nerve growth factor(NGFB) have been assigned to mouse chromosome 3 and human chromosome 1p22. The human gene for the beta subunit of nerve growth factor is located on the proximal short arm of chromosome 1. A mutation in the nerve growth factor beta gene(NGFB) causes loss of pain perception.