

**Anti-NGF/NGF beta Antibody**  
**Catalog # ABO10542****Specification**

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

|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">P01138</a> |
| Host              | Rabbit                 |
| Reactivity        | Human, Mouse, Rat      |
| Clonality         | Polyclonal             |
| Format            | Lyophilized            |

**Description**

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

**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, Rat, Mouse<br>

**Subcellular Localization**

Secreted.

**Protein Name**

Beta-nerve growth factor(Beta-NGF)

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human NGF(162-173aa EVNINNSVFKQY), identical to the related rat sequence, and different from the related mouse sequence by one amino acid.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

Storage

**At -20°C for one year. After reconstitution, 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: [14976160](http://www.uniprot.org/citations/14976160), PubMed: [20978020](http://www.uniprot.org/citations/20978020)). Extracellular ligand for the NTRK1 and NGFR receptors, activates cellular signaling cascades to regulate neuronal proliferation, differentiation and survival (Probable) (PubMed: [20978020](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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

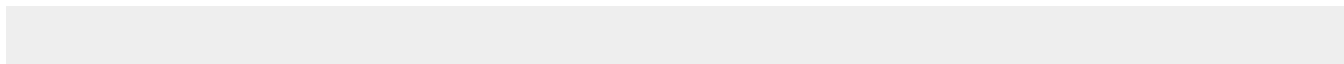
Secreted. Endosome lumen {ECO:0000250|UniProtKB:P01139}. Note=ProNGF is endocytosed after binding to the cell surface receptor formed by SORT1 and NGFR {ECO:0000250|UniProtKB:P01139}

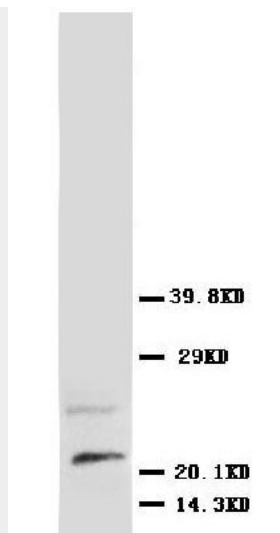
### Anti-NGF/NGF beta Antibody - Protocols

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

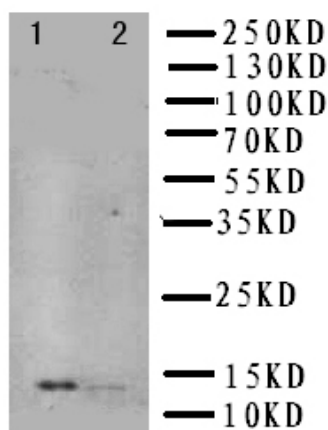
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-NGF/NGF beta Antibody - Images





Anti-NGF antibody, ABO10542, Western blottingWB: Rat Brain Tissue Lysate



Anti-NGF antibody, ABO10542, Western blottingLane 1: Recombinant Human NGFB Protein 10ngLane 2: Recombinant Human NGFB Protein 5ng

### 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.