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**Product Name: NGF (12T9) Rabbit Monoclonal Antibody****Catalog #: AMRe14676**

For research use only.

**Summary**

<b>Description</b>	Recombinant rabbit monoclonal antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,ICC/IF
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Concentration</b>	0.5mg/ml. The concentration of this product may be batch-dependent.
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,ICC/IF 1:100-1:200
<b>Molecular Weight</b>	27kDa

**Antigen Information**

<b>Gene Name</b>	NGF
<b>Alternative Names</b>	NGF;Beta-NGF;HSAN5;MGC161426;MGC161428;NGFB;proNGF;
<b>Gene ID</b>	4803.0
<b>SwissProt ID</b>	P01138
<b>Immunogen</b>	A synthetic peptide of human NGF

**Background**

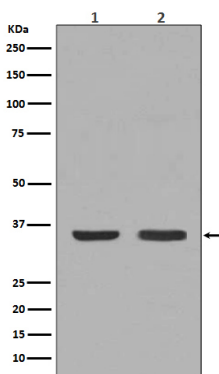
Nerve growth factor (NGF) is a small, secreted protein and member of the neurotrophin family of growth factors that promote

neuronal cell survival and differentiation. Producing cells release NGF that bind and activate TrkA high affinity receptors to mediate NGF-driven signaling. NGF also binds to a low affinity p75 (NTR) receptors, which belong to the death receptor family. 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 (PubMed:20978020) (Probable). The immature NGF precursor (proNGF) functions as 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).

## Research Area

Neuroscience

## Image Data



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