

## **Product datasheet for TA301201**

### 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

OriGene Technologies, Inc.

# NGF Rabbit Monoclonal Antibody [Clone ID: EP1318Y]

## **Product data:**

**Product Type:** Primary Antibodies

Clone Name: EP1318Y

Applications: WB

**Recommended Dilution:** WB: 1: 1,000; ICC: 1: 100; FC: 1:200; IP: 1:20

**Reactivity:** Mouse, Rat, Human

Host: Rabbit Isotype: IgG

Clonality: Monoclonal

**Immunogen:** A synthetic peptide corresponding to residues near the N-terminus of human NGF-beta

precursor (pro-NGF) form was used as an immunogen. This antibody recognizes pro-NGF.

**Formulation:** pH: 7.40

Preservative: 0.01% Sodium azide Constituents: 50% Glycerol, 0.05% BSA

**Purification:** Tissue culture supernatant

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 27 kDa

**Gene Name:** nerve growth factor

Database Link: NP 002497

Entrez Gene 18049 MouseEntrez Gene 310738 RatEntrez Gene 4803 Human

P01138



Background:

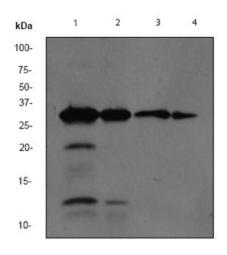
Nerve growth factor (NGF) stimulates division and differentiation of sympathetic and embryonic sensory neurons. NGF is thought to have a profound effect on the development and maintenance of sympathetic and embryonic sensory neurons (1). NGF activity isolated from the male mouse submaxillary gland (MSG) consists of three types of subunits, alpha, beta and gamma, which specifically interact to form a 7S, approximately 130,000-molecular weight (Mr) complex. The 7S complex contains two identical 118-amino acid beta-chains, which are solely responsible for the nerve growth-stimulating activity of NGF. While NGF is found in almost all vertebrates, most research has focused on murine NGF, as the mouse male submaxillary gland contains higher levels of this polypeptide than other tissues (2). A precursor form of NGF (pro-NGF) selectively binds to p75NTR receptor and leads to apoptosis with expression of TrkA and p75NTR . However, mature NGF binding to TrkA and p75NTR receptors shows opposite effect and leads to activation of cell survival (3).

**Synonyms:** Beta-NGF; HSAN5; NGFB

**Protein Families:** Druggable Genome, Secreted Protein

**Protein Pathways:** Apoptosis, MAPK signaling pathway, Neurotrophin signaling pathway

# **Product images:**



Western blot - NGF antibody [EP1318Y]; All lanes: Anti-NGF antibody [EP1318Y] at 1/5000 dilution.Lane 1: 10ng human pro-NGF recombinant protein.Lane 2: 5ng human pro-NGF recombinant protein.Lane 3: 1ng human pro-NGF recombinant protein.Lane 4: 0.5ng human pro-NGF recombinant protein.Secondary.HRP labelled goat anti-rabbit at 1/2000 dilution.Predicted band size: 27 kDa.Observed band size: 27 kDa.Additional bands at: 13 kDa, 20 kDa. We are unsure as to the identity of these extra bands.