# abcam

# Product datasheet

# Anti-proNGF antibody [EP1320Y] ab52918



★★★★ 4 Abreviews 76 References 10 Images

#### Overview

**Product name** Anti-proNGF antibody [EP1320Y]

**Description** Rabbit monoclonal [EP1320Y] to proNGF

**Host species** Rabbit

**Tested applications** Suitable for: ICC/IF, WB, IHC-P Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Human fetal brain, cerebellum, HeLa, MCF-7, and MDA-MB-231 cell lysates. Mouse brain,

cerebellum, and thyroid cell lysates; Rat brain, cerebellum, and thyroid cell lysates. IHC-P: Human

brain, human cerebral cortex. ICC/IF: U87-MG cells.

**General notes** This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity - Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

**Purity** Protein A purified

Clonality Monoclonal Clone number EP1320Y

**Isotype** IgG

## **Applications**

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab52918 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/300.
WB	<b>★★★★☆ (1)</b>	1/1000. Predicted molecular weight: 27 kDa.  For unpurified, use 1/500.
IHC-P	★★★☆☆ (3)	1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.

**Function** Nerve growth factor is important for the development and maintenance of the sympathetic and

sensory nervous systems. Extracellular ligand for the NTRK1 and NGFR receptors, activates cellular signaling cascades through those receptor tyrosine kinase to regulate neuronal proliferation, differentiation and survival. Inhibits metalloproteinase dependent proteolysis of

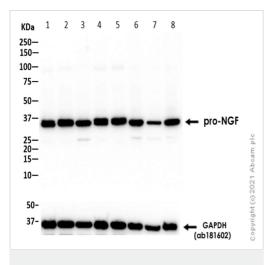
platelet glycoprotein VI (PubMed:20164177).

**Involvement in disease** Neuropathy, hereditary sensory and autonomic, 5

Sequence similarities Belongs to the NGF-beta family.

Cellular localization Secreted.

#### **Images**



Western blot - Anti-proNGF antibody [EP1320Y] (ab52918)

**All lanes :** Anti-proNGF antibody [EP1320Y] (ab52918) at 1/1000 dilution

Lane 1: Mouse brain lysate

Lane 2: Rat brain lysate

Lane 3: Human cerebellum lysate

Lane 4: Mouse cerebellum lysate

Lane 5: Rat cerebellum lysate

Lane 6: Hela (Human cervix adenocarcinoma epithelial cell) whole

cell lysate

Lane 7: MCF-7 (Human breast adenocarcinoma epithelial cell)

whole cell lysate

Lane 8: MDA-MB-231 (Human breast adenocarcinoma epithelial

cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

#### **Secondary**

All lanes: Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000

dilution

Developed using the ECL technique.

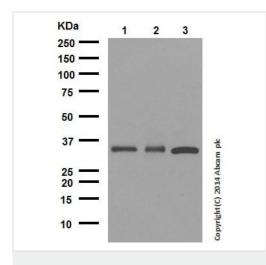
Predicted band size: 27 kDa Observed band size: 32 kDa

Exposure time: 20 seconds

The positive cell lines (Lanes 7-9) are consistent with the literature:

PMID:12944907, Fig1.

Blocking buffer: 5% NFDM/TBST.



Western blot - Anti-proNGF antibody [EP1320Y] (ab52918)

**All lanes :** Anti-proNGF antibody [EP1320Y] (ab52918) at 1/1000 dilution (purified)

Lane 1: Human fetal brain lysate

Lane 2: Human fetal thymus lysate

Lane 3: HeLa cell lysate

Lysates/proteins at 20 µg per lane.

# Secondary

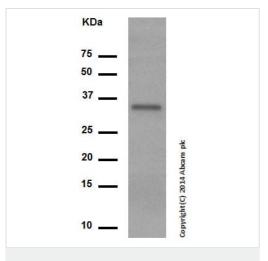
All lanes: HRP conjugated goat anti-rabbit lgG (H+L) at 1/1000

dilution

**Predicted band size:** 27 kDa **Observed band size:** 32 kDa

Blocking Buffer: 5% NFDM/TBST

Dilution Buffer: 5% NFDM/TBST



Western blot - Anti-proNGF antibody [EP1320Y] (ab52918)

Anti-proNGF antibody [EP1320Y] (ab52918) at 1/1000 dilution (purified) + Mouse thyroid lysate at 20 µg

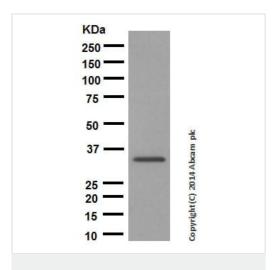
#### Secondary

HRP conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

**Predicted band size:** 27 kDa **Observed band size:** 32 kDa

Blocking Buffer: 5% NFDM/TBST

Dilution Buffer: 5% NFDM/TBST



Western blot - Anti-proNGF antibody [EP1320Y] (ab52918)

Anti-proNGF antibody [EP1320Y] (ab52918) at 1/2000 dilution (purified) + Rat thyroid lysate at  $20 \mu g$ 

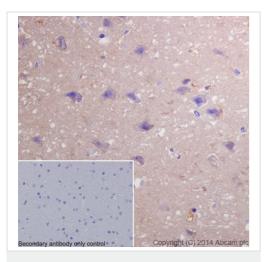
#### Secondary

HRP conjugated goat anti-rabbit lgG (H+L) at 1/1000 dilution

Predicted band size: 27 kDa Observed band size: 32 kDa

Blocking Buffer: 5% NFDM/TBST

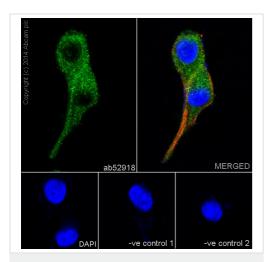
Dilution Buffer: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-proNGF antibody

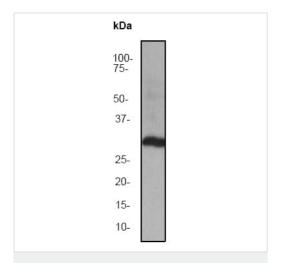
[EP1320Y] (ab52918)

Immunohistochemical staining of paraffin embedded human cerebral cortex with purified ab52918 at a working dilution of 1 in 250. The secondary antibody used is <a href="mailto:ab97051">ab97051</a> Goat Anti-Rabbit IgG H&L (HRP) at a dilution of 1/500. The sample is counterstained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Immunocytochemistry/ Immunofluorescence - AntiproNGF antibody [EP1320Y] (ab52918)

Immunofluorescence staining of U87-MG cells with purified ab52918 at a working dilution of 1 in 300, counter-stained with DAPI. Tubulin was stained with mouse anti-tubulin at a dilution of 1/1000 (ab7291) and Alexa Fluor® 594 goat anti-mouse at a dilution of 1/500 (ab150120). The secondary antibody was ab150077 Alexa Fluor® 488 goat anti rabbit, used at a dilution of 1 in 500. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative controls are shown in the bottom middle and right hand panels - for the first negative control, purified ab52918 was used at a dilution of 1/200 followed by an Alexa Fluor® 555 goat anti-mouse antibody at a dilution of 1/500 and for the second negative control mouse primary antibody (ab7291) and anti-rabbit secondary antibody (ab15007) were used.



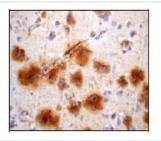
Western blot - Anti-proNGF antibody [EP1320Y] (ab52918)

Anti-proNGF antibody [EP1320Y] (ab52918) at 1/500 dilution (unpurified) + fetal thyroid tissue at 10  $\mu g$ 

#### **Secondary**

Goat anti rabbit lgG HRP antibody at 1/2000 dilution

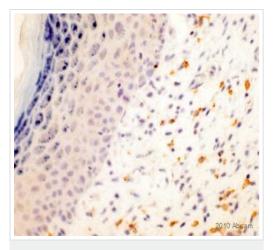
**Predicted band size:** 27 kDa **Observed band size:** 27 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-proNGF antibody [EP1320Y] (ab52918)

Immunohistochemical staining of paraffin embedded human brain using unpurified ab52918 at 1/50-1/100 dilution.

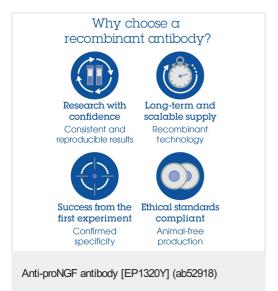
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-proNGF antibody
[EP1320Y] (ab52918)

This image is courtesy of an anonymous Abreview.

Immunohistochemical staining of proNGF mouse tissue sections (formalin/ PFA-fixed paraffin-embedded tissue sections) with unpurified ab52918. The sections were formaldehyde fixed, subjected to heat mediated antigen retrieval and blocked for 10 minutes at 25°C. The primary antibody was diluted 1/50 and incubated with the sample for 1 hour at 25°C. An HRP polymer antirabbit IgG system was used undiluted, as the secondary antibody.



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