# abcam

# Product datasheet

# Anti-p75 NGF Receptor antibody [EP1039Y] - Low endotoxin, Azide free ab221212



RabMAb

10 References 10 图像

### 概述

产品名称 Anti-p75 NGF Receptor抗体[EP1039Y] - Low endotoxin, Azide free

描述 兔单克隆抗体[EP1039Y] to p75 NGF Receptor - Low endotoxin, Azide free

宿主 Rabbit

特异性 The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for

mouse and rat.

经测试应用 适用于: IP, IHC-P, ICC/IF, WB, Flow Cyt (Intra)

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 PC12 cell membrane lysate, PC-12 cell lysate Human brain gilioma tissue

常规说明 ab221212 is the carrier-free version of <u>ab52987</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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**.

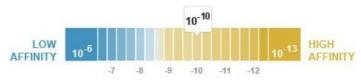
Our <u>Low endotoxin, azide-free formats</u> have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

# 性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C. Do Not Freeze.

**解离常数(K<sub>D</sub>)** K<sub>D</sub> = 3.25 x 10 <sup>-10</sup> M



Learn more about K<sub>D</sub>

**存储溶液** pH: 7.20

Constituent: PBS

EP1039Y

**无载体** 是

纯**度** Protein A purified

**克隆** 单克隆

**同种型** IgG

应用

克隆编号

The Abpromise guarantee Abpromise™承诺保证使用ab221212于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.

靶标

功能

well as cell death of neural cells.

序列相似性 Contains 1 death domain.

Contains 4 TNFR-Cys repeats.

结**构域** Death domain is responsible for interaction with RANBP9.

The extracellular domain is responsible for interaction with NTRK1.

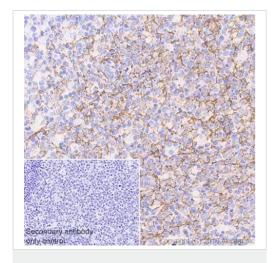
翻译后修饰 N- and O-glycosylated.

O-linked glycans consist of Gal(1-3)GalNAc core elongated by 1 or 2 NeuNAc.

Phosphorylated on serine residues.

细胞定位 Membrane.

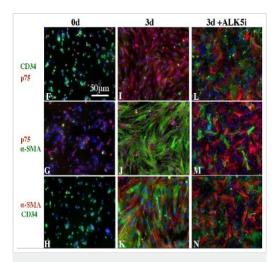
#### 图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-p75 NGF Receptor antibody [EP1039Y] - Low endotoxin, Azide free (ab221212)

Purified <u>ab52987</u> staining p75 NGF receptor in paraffin embedded Human tonsil tissue sections by Immunohistochemistry. Antigen retrieval was by heat mediation using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0). Samples were incubated with primary antibody at 3.3µg/ml. A ready to use Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on germinal centre of human tonsil.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52987).



Immunocytochemistry/ Immunofluorescence - Antip75 NGF Receptor antibody [EP1039Y] - Low endotoxin, Azide free (ab221212)

Image from Abe SI. et al. PLoS One. 2017 Nov 30;12(11):e0188705. doi: 10.1371/journal.pone.0188705.

Immunoprecipitation - Anti-p75 NGF Receptor antibody [EP1039Y] - Low endotoxin, Azide free (ab221212)

The differentiation capacity of purified CD34 $^+$  cells cultured for 3 days in the presence or absence of ALK5i was evaluated by performing immunofluorescence analysis assessing whether CD34 $^+$  cells had changed to cells expressing p75 and/or  $\alpha$ -SMA. Expressions of CD34, p75 and  $\alpha$ -SMA were assessed by immunofluorescence on day 0 (F-H), day 3 in SP+f medium (FK), or day 3 in the same medium as (FK) but with ALK5i (L-N).

Cultured re-aggregates were fixed in 4% PFA and embedded in paraffin. Sections (5 ∞m) were boiled in 0.01 M citrate (pH 6.0) with 0.1% Tween 20 for 10 min, washed three times in 0.1% Tween-20/PBS, transferred to blocking solution containing 5% BSA and 5% horse serum (Sigma) or goat serum (Invitrogen) in 0.1% Triton X-100/PBS for 1 hr, and incubated with primary antibody (p75 at 1/100 dilution) at 4°C overnight. After washing, the secondary antibody was added, and the sections were incubated for 2 hrs at room temperature. Microscopic images were obtained using a CCD camera (DP72, Olympus, Tokyo) mounted on a fluorescence microscope (BX60, or BX61VS-ASW, Olympus). Cultured cells on coverglasses were fixed in 4% PFA. Antigen retrieval was done by incubation with 100% methanol (-20°C) 10 min, and 0.3% Triton X-100 for 10 min.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab52987</u>).

Lane 1 (input): PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate 10µg

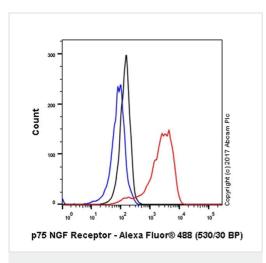
Lane 2 (+): PC-12 whole cell lysate

**Lane 3 (-):** Rabbit monoclonal  $\lg G$  (<u>ab172730</u>) instead of <u>ab52987</u> in PC-12 whole cell lysate

Blocking and diluting buffer: 5% NFDM/TBST.

Exposure: 10 seconds

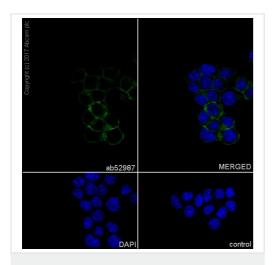
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52987).



Flow Cytometry (Intracellular) - Anti-p75 NGF Receptor antibody [EP1039Y] - Low endotoxin, Azide free (ab221212)

Intracellular Flow Cytometry analysis of PC-12 (rat adrenal gland pheochromocytoma) cells labeling p75 NGF Receptor with purified ab52987 at 1/80 dilution (1ug/mL) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluor®488) at 1/2000 dilution was used as the secondary antibody. Rabbit monoclonal lgG (ab172730) (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52987).

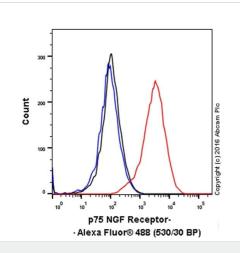


Immunocytochemistry/ Immunofluorescence - Antip75 NGF Receptor antibody [EP1039Y] - Low endotoxin, Azide free (ab221212)

Purified  $\underline{ab52987}$  staining p75 NGF receptor in PC-12 (rat adrenal gland pheochromocytoma) by ICC/IF

(Immunocytochemistry/Immunofluorescence). Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% TritonX-100. Samples were incubated with primary antibody at 3.9  $\mu$ g/ml. An AlexaFluor<sup>®</sup>488 Goat anti-Rabbit was used as the secondary antibody at 2  $\mu$ g/ml. DAPI was used as a nuclear counterstain. Confocal image showing cytoplasmic and Membranous staining in PC-12 cells.

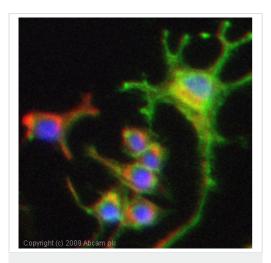
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52987).



Flow Cytometry (Intracellular) - Anti-p75 NGF Receptor antibody [EP1039Y] - Low endotoxin, Azide free (ab221212)

Intracellular Flow Cytometry analysis of PC-12 (rat adrenal gland pheochromocytoma) cells labeling p75 NGF Receptor with unpurified <a href="mailto:ab52987">ab52987</a> at 1/60 dilution (10ug/mL) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluor<sup>®</sup>488) at 1/2000 dilution was used as the secondary antibody. Rabbit monoclonal lgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.

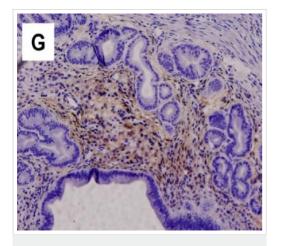
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52987).



Immunocytochemistry/ Immunofluorescence - Antip75 NGF Receptor antibody [EP1039Y] - Low endotoxin, Azide free (ab221212)

ICC/IF image of <u>ab52987</u> stained PC12 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1 hour to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (<u>ab52987</u>, 1 μg/mL) overnight at 4°C. The secondary antibody (green) was Alexa Fluor<sup>®</sup> 488 goat anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1 hour. Alexa Fluo<sup>®</sup> 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1 hour. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.4 μM.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab52987</u>).

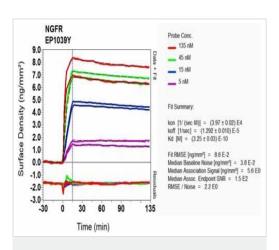


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-p75 NGF Receptor antibody [EP1039Y] - Low endotoxin, Azide free (ab221212)

Image from Li Yet al. Reprod Biol Endocrinol. 2011 Mar 8;9:30. Fig 2.; doi:10.1186/1477-7827-9-30; 8 March 2011 Reproductive Biology and Endocrinology 2011 9:30. Immunohistochemical analysis of murine uterus tissue with adenomyosis, staining p75 NGF Receptor with **ab52987**.

Antigen retrieval was performed by heat mediation in citrate buffer (pH 6). Tissue was blocked with goat serum for 15 minutes before incubating with primary antibody (1/100) overnight at 4°C. A biotinylated goat anti-rabbit lgG was used as the secondary antibody and staining was detected using DAB.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52987).



Ol-RD Scanning - Anti-p75 NGF Receptor antibody [EP1039Y] - Low endotoxin, Azide free (ab221212)

Equilibrium disassociation constant ( $K_D$ ) Learn more about  $K_D$ 

# Click here to learn more about K<sub>D</sub>

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab52987</u>).



Anti-p75 NGF Receptor antibody [EP1039Y] - Low endotoxin, Azide free (ab221212)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

#### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors