# abcam

# Product datasheet

# Anti-TrkB antibody [EPR17805-146] ab187041

重组 RabMAb

1 Abreviews 13 References 9图像

概述

产品名称 Anti-TrkB抗体[EPR17805-146]

描述 兔单克隆抗体[EPR17805-146] to TrkB

宿主 Rabbit

经测试应用 适用于: Indirect ELISA, ICC/IF, WB, IHC-P, IP

不适用于: Flow Cyt

种属反应性 与反应: Mouse, Rat

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Mouse TrkB active protein; mouse and rat brain lysates. IHC-P: Mouse and rat cerebral

cortex tissues and mouse primary neuron cell. IP: Mouse brain lysate. Indirect ELISA: Mouse TrkB

antigen. ICC/IF: mouse primary neuron cells

This product is a recombinant monoclonal antibody, which offers several advantages including: 常规说明

- 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**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆

克隆编号 EPR17805-146

**同种型** IgG

#### 应用

The Abpromise guarantee

Abpromise™承诺保证使用ab187041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
Indirect ELISA		Use at an assay dependent concentration.
ICC/IF		1/50.
WB		1/5000. Detects a band of approximately 140, 90 kDa (predicted molecular weight: 92 kDa).
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/50.

应用说明

Is unsuitable for Flow Cyt.

如	枟
私	120

功能 Receptor for brain-derived neurotrophic factor (BDNF), neurotrophin-3 and neurotrophin-4/5 but

not nerve growth factor (NGF). Involved in the development and/or maintenance of the nervous system. This is a tyrosine-protein kinase receptor. Known substrates for the TRK receptors are

SHC1, PI-3 kinase, and PLC-gamma-1.

组织特异性 Isoform TrkB is widely expressed, mainly in the nervous tissue. In the CNS, expression is

observed in the cerebral cortex, hippocampus, thalamus, choroid plexus, granular layer of the cerebellum, brain stem, and spinal cord. In the peripheral nervous system, it is expressed in many

cranial ganglia, the ophtalmic nerve, the vestibular system, multiple facial structures, the

submaxillary glands, and dorsal root ganglia. Isoform TrkB-T1 is expressed in multiple tissues, mainly in brain, pancreas, kidney and heart. Isoform TrkB-T-Shc is predominantly expressed in

brain.

序列相似性 Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily.

Contains 2 lg-like C2-type (immunoglobulin-like) domains.

Contains 2 LRR (leucine-rich) repeats.

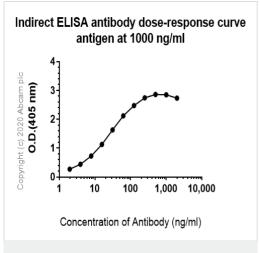
Contains 1 LRRCT domain. Contains 1 LRRNT domain.

Contains 1 protein kinase domain.

翻译后修饰 Ligand-mediated auto-phosphorylation.

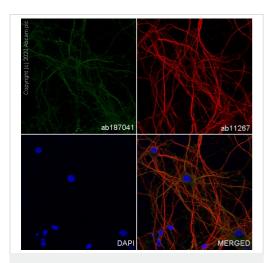
细胞定位 Membrane.

#### 图片



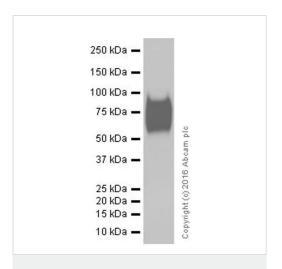
Indirect ELISA - Anti-TrkB antibody [EPR17805-146] (ab187041)

ELISA analysis of Mouse TrkB (Ntrk2) recombinant protein at 1000 ng/ml with ab187041. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit lgG (H+L) at 1/2500 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-TrkB antibody [EPR17805-146] (ab187041) Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neuron cells labelling TrkB with ab187041 at 1/50 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing positive staining in mouse primary neuron.Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection. **ab11267** Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/500 4 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) at 1/1000 2 ug/ml dilution.



Western blot - Anti-TrkB antibody [EPR17805-146] (ab187041)

Anti-TrkB antibody [EPR17805-146] (ab187041) at 1/5000 dilution + Mouse TrkB active protein at 0.01 µg

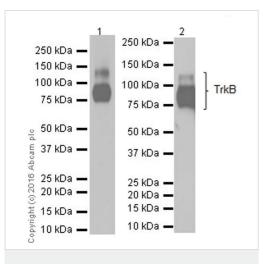
#### **Secondary**

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

**Predicted band size:** 92 kDa **Observed band size:** 75-85 kDa

Exposure time: 3 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-TrkB antibody [EPR17805-146] (ab187041)

Mouse TrkB active protein contains aa1-429 with a C-terminal poly histidine-tag.

**All lanes :** Anti-TrkB antibody [EPR17805-146] (ab187041) at 1/5000 dilution

Lane 1 : Mouse brain lysate

Lane 2 : Rat brain lysate

Lysates/proteins at 10 µg per lane.

### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

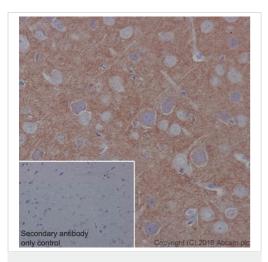
**Predicted band size:** 92 kDa **Observed band size:** 140,90 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

TrkB is abundantly expressed in the central and peripheral nervous system. The 140 kDa observed MW which is higher than the predicted one is due to the glycosylation modification.

90 kDa corresponds to the truncated form, as observed in the literature (PMID:24860020).



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

[EPR17805-146] (ab187041)

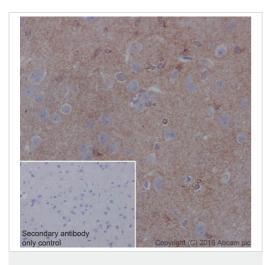
Immunohistochemical analysis of paraffin-embedded mouse cerebral cortex tissue labeling TrkB with ab187041 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasmic and membrane staining on mouse cerebral cortex is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TrkB antibody
[EPR17805-146] (ab187041)

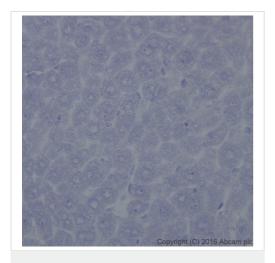
Immunohistochemical analysis of paraffin-embedded rat cerebral cortex tissue labeling TrkB with ab187041 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasmic and membrane staining on rat cerebral cortex is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



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

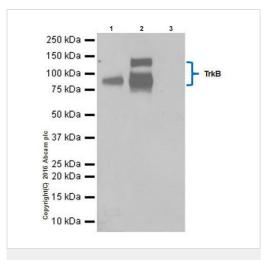
[EPR17805-146] (ab187041)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling TrkB with ab187041 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Negative control: no staining on mouse liver [PMID: 2555172].

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-TrkB antibody [EPR17805-146] (ab187041)

TrkB was immunoprecipitated from 1 mg of mouse brain lysate with ab187041 at 1/50 dilution.

Western blot was performed from the immunoprecipitate using ab187041 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10000 dilution.

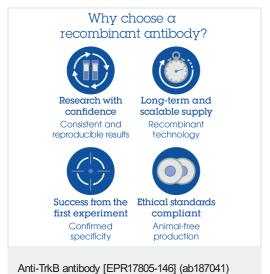
Lane 1: Mouse brain lysate 10µg (Input).

Lane 2: ab187041 IP in mouse brain lysate.

Lane 3: Rabbit lgG, monoclonal [EPR25A] - Isotype Control (ab172730) instead of ab187041 in mouse brain lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.



## 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