

Anti-Pan Trk antibody [EPR17341] - BSA and Azide free ab218577

Recombinant RabMAb

[1 References](#) [13 Images](#)

Overview

Product name	Anti-Pan Trk antibody [EPR17341] - BSA and Azide free
Description	Rabbit monoclonal [EPR17341] to Pan Trk - BSA and Azide free
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 and cerebellum lysates, Mouse and Rat brain lysates. IHC-P: Human astrocytoma and cerebral cortex tissue, Mouse cerebral cortex tissue, Rat cerebral cortex tissue. ICC/IF: Neuro-2a cells.
General notes	<p>ab218577 is the carrier-free version of ab181560.</p> <p>This is the Research Use Only (RUO) antibody of the clone that has been used in the <i>in vitro</i> diagnostic VENTANA pan-TRK (EPR17341) assay (an immunohistochemistry assay).</p> <p>Our carrier-free 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.</p> <p>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.</p> <p>Use our conjugation kits 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.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- 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. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR17341
Isotype	IgG

Applications

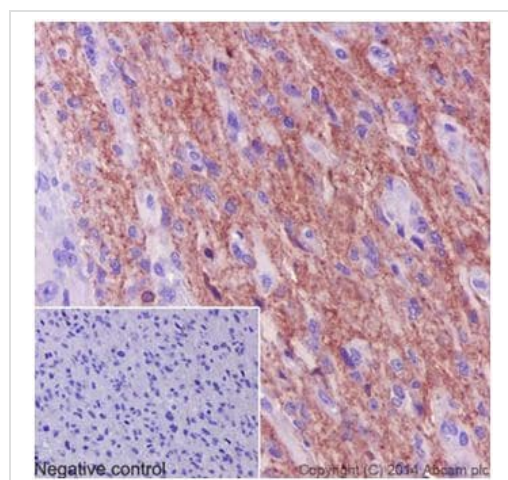
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab218577 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 30,140 kDa (predicted molecular weight: 92 kDa).
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.

Target

Relevance Family of neurotrophic tyrosine kinase (NTRK1/2/3) genes which encode TrkA, TrkB and TrkC protein kinases. The three family members are activated by different neurotrophins: TrkA is activated by Nerve growth factor (NGF), TrkB by Brain-derived neurotrophic factor (BDNF) or neurotrophin-4 (NT-4) and TrkC by NT-3. Neurotrophin signalling activates cellular pathways involved in the development and the maturation of the central and peripheral nervous systems through regulation of proliferation, differentiation and survival of sympathetic and nervous neurons. Localization TrkA: Cell membrane. Early endosome membrane. Late endosome membrane. Internalized to endosomes upon binding of NGF or NT-3 and further transported to the cell body via a retrograde axonal transport. Localized at cell membrane and early endosomes before nerve growth factor (NGF) stimulation. Recruited to late endosomes after NGF stimulation. Colocalized with RAPGEF2 at late endosomes (By similarity). TrkB: Membrane. TrkC: Membrane.

Images



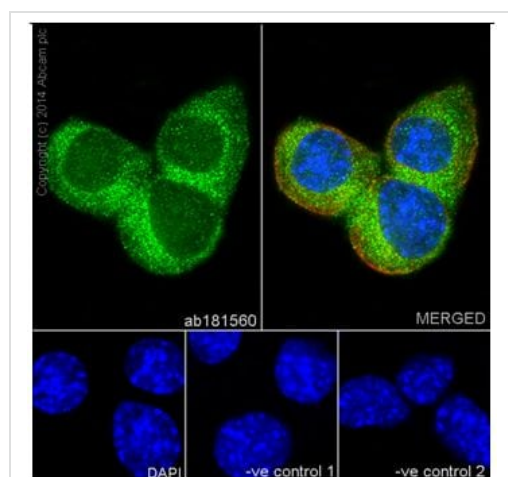
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

Immunohistochemical analysis of paraffin-embedded Human astrocytoma tissue labeling Pan Trk with **ab181560** at 1/500 dilution, followed by **Anti-Rabbit HRP (ab97051)** at 1/500 dilution. Astrocytoma cells show strong cytoplasmic staining. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181560**).

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



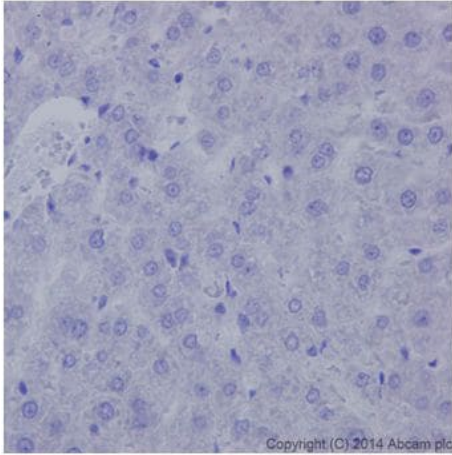
Immunocytochemistry/ Immunofluorescence - Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% tritonX-100 permeabilized Neuro-2a (Mouse neuroblastoma cells) cells labeling Pan Trk with **ab181560** at 1/250 dilution. Goat anti-rabbit IgG (Alexa Fluor[®] 488) (**ab150077**) at 1/400 dilution was used as the secondary antibody (green). Confocal image showing cytoplasmic staining on Neuro-2a cells is shown. The nuclear counter stain is DAPI (blue). Tubulin is detected with **ab7291** (Tubulin mouse mAb) at 1/500 and **ab150120** (Alexa Fluor[®] 594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows;

1. **ab181560** at 1/250 dilution followed by **ab150120** (Goat anti mouse IgG (Alexa Fluor[®] 594)) at 1/500 dilution.
2. **ab7291** (anti-Tubulin mouse mAb) at 1/500 dilution followed by **ab150077** (Goat anti rabbit IgG (Alexa Fluor[®] 488)) at 1/400 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181560**).

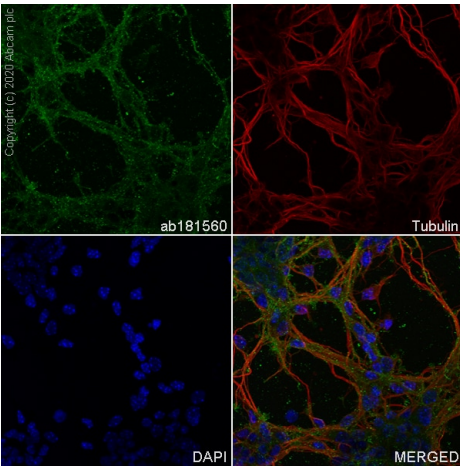


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

Immunohistochemical analysis of paraffin-embedded Rat liver tissue labeling Pan Trk with **ab181560** at 1/500 dilution, followed by **Anti-Rabbit HRP (ab97051)** at 1/500 dilution. The staining is negative on Rat liver. Counter stained with Hematoxylin. Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181560**).

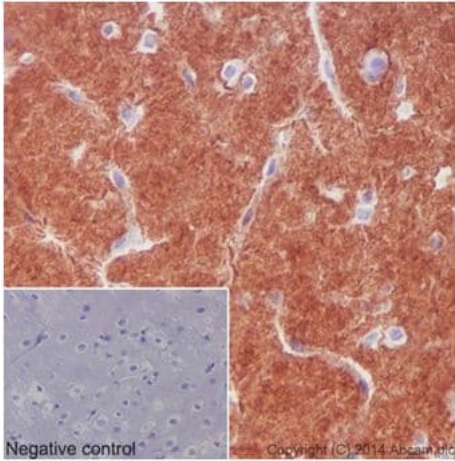
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neural mix culture cells labelling Pan Trk with **ab181560** at 1:100 dilution, followed by **ab150077** AlexaFluor[®]488 Goat anti-Rabbit secondary antibody at 1:1000 dilution (Green). Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection. **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) was used to counterstain tubulin at 1:200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181560**).

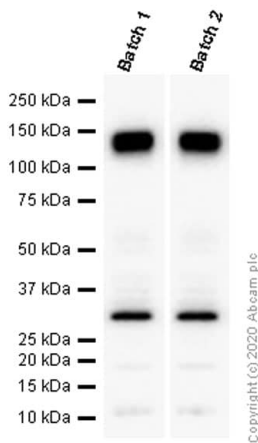


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

Immunohistochemical analysis of paraffin-embedded Rat cerebral cortex tissue labeling Pan Trk with **ab181560** at 1/500 dilution, followed by **Anti-Rabbit HRP (ab97051)** at 1/500 dilution. Cytoplasmic staining is observed on neurons of Rat cerebral cortex. Counter stained with Hematoxylin. Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

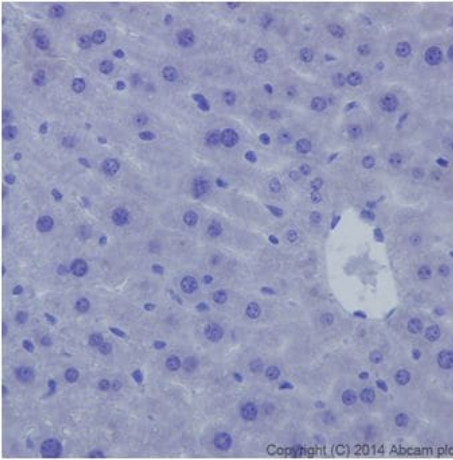
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181560**).

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



Western blot - Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

This data was developed using **ab181560**, the same antibody clone in a different buffer formulation. Different batches of **ab181560** were tested on human brain lysate at 1.5 µg/ml. 15 µg of lysate was loaded in each lane. Bands observed at 30,140 kDa.

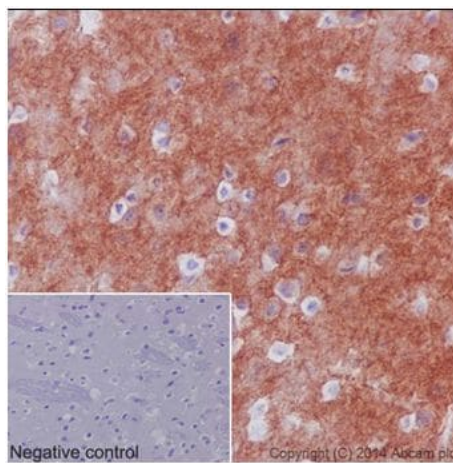


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling Pan Trk with **ab181560** at 1/500 dilution, followed by **Anti-Rabbit HRP (ab97051)** at 1/500 dilution. The staining is negative on Mouse liver. Counter stained with Hematoxylin. Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181560**).

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



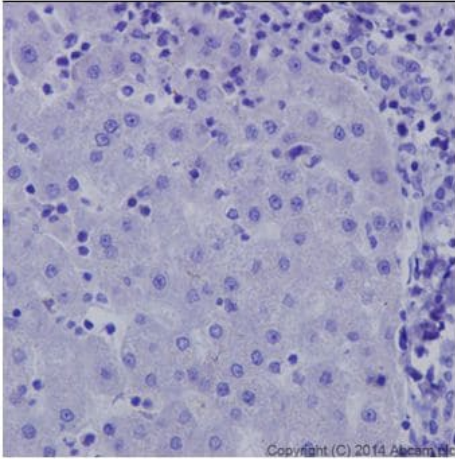
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

Immunohistochemical analysis of paraffin-embedded Mouse cerebral cortex tissue labeling Pan Trk with **ab181560** at 1/500 dilution, followed by **Anti-Rabbit HRP (ab97051)** at 1/500 dilution. Cytoplasmic staining is observed on neurons of mouse cerebral cortex. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181560**).

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

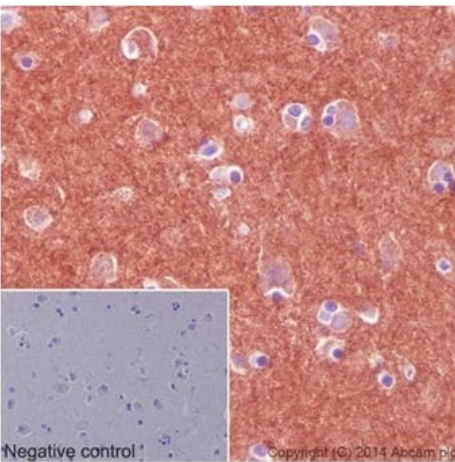


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling Pan Trk with **ab181560** at 1/500 dilution, followed by **Anti-Rabbit HRP (ab97051)** at 1/500 dilution. The staining is negative on normal Human liver. Counter stained with Hematoxylin. Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181560**).

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

Immunohistochemical analysis of paraffin-embedded Human cerebral cortex tissue labeling Pan Trk with **ab181560** at 1/500 dilution, followed by **Anti-Rabbit HRP (ab97051)** at 1/500 dilution. Cytoplasmic staining is observed on neurons of human cerebral cortex. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181560**).

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

Tissue Microarray (TMA) data for ab181560					
Mouse normal tissue samples			Rat normal tissue samples		
Mouse cardiac muscle	x	Mouse pancreas	x	Rat cardiac muscle	x
Mouse cerebrum	✓	Mouse skeletal muscle	x	Rat cerebrum	✓
Mouse colon	x	Mouse skin	x	Rat colon	x
Mouse kidney	x	Mouse spleen	x	Rat kidney	x
Mouse liver	x	Mouse stomach	x	Rat liver	x
Mouse lung	x	Mouse testis	x	Rat lung	x

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

Tissue Microarrays stained for " Anti-Pan Trk antibody [EPR17341]" using "**ab181560**" in immunohistochemical analysis. This table provides a detailed overview of positive (tick mark) and negative (cross mark) staining per sample type tested. The sections were pre-treated using Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). The sections were incubated with **ab181560** at +4°C overnight followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer).

Tissue Microarray (TMA) data for ab181560					
Human normal tissue samples			Human malignant tissue samples		
Human cardiac muscle	x	Human placenta	x	Clear cell carcinoma of human kidney	x
Human cerebrum	✓	Human skeletal muscle	x	Human bladder cancer	x
Human colon	x	Human skin	x	Human breast carcinoma	x
Human endometrium	x	Human spleen	x	Human cervical carcinoma	x
Human kidney	x	Human stomach	x	Human colon carcinoma	x
Human liver	x	Human testis	x	Human endometrial carcinoma	x
Human lung	x	Human thyroid	x	Human gastric adenocarcinoma	x
Human mammary gland	x	Human tonsil	x		
Human pancreas	x				

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

Tissue Microarrays stained for " Anti-Pan Trk antibody [EPR17341]" using "**ab181560**" in immunohistochemical analysis. This table provides a detailed overview of positive (tick mark) and negative (cross mark) staining per sample type tested. The sections were pre-treated using Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). The sections were incubated with **ab181560** at +4°C overnight followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP polymer).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Pan Trk antibody [EPR17341] - BSA and Azide free (ab218577)

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

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