abcam

ab76291

Anti-Pan Trk antibody [EP1058Y]

Anti-Pan Trk antibody [EP1058Y] (ab76291) is a rabbit monoclonal antibody detecting Pan Trk in **Western Blot, Flow Cytometry (Intra), IP, IHC-P, ICC/IF, ELISA**. Suitable for **Human, Mouse, Rat**.

- Biophysical QC for unrivalled batch-batch consistency
- Over 50 publications
- Trusted since 2009

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP1058Y
Purification technique	Affinity purification Protein A
Specificity	This antibody detects both phosphorylated and unphosphorylated Pan Trk. Based on the WB and FC data, this antibody has relatively lower affinity to TrkC compared to TrkA and TrkB.
Concentration	0.747 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

I-ELISA

Tested

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Expected

Species	Mouse, Human, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IP

Tested

Species	Mouse
Dilution info	1/40
Notes	-

Species	Human
Dilution info	1/40
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/100
Notes	-

Species	Human
Dilution info	1/100
Notes	-

Expected

Species	Rat

Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/130
Notes	Paraformaldehyde or methanol fixed cells, permeabilization recommended. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/1000

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

Species	Human
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/1000
Notes	See . Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Target data

See full target information NTRK1

Function	Receptor tyrosine kinase 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. High affinity receptor for NGF which is its primary ligand (PubMed:1281417, PubMed:15488758, PubMed:17196528, PubMed:1849459, PubMed:1850821, PubMed:22649032, PubMed:27445338, PubMed:8325889). Can also bind and be activated by NTF3/neurotrophin-3. However, NTF3 only supports axonal extension through NTRK1 but has no effect on neuron survival (By similarity). Upon dimeric NGF ligand-binding, undergoes homodimerization, autophosphorylation and activation (PubMed:1281417). Recruits, phosphorylates and/or activates several downstream effectors including SHC1, FRS2, SH2B1, SH2B2 and PLCG1 that regulate distinct overlapping signaling cascades driving cell survival and differentiation. Through SHC1 and FRS2 activates a GRB2-Ras-MAPK cascade that regulates cell differentiation and survival. Through PLCG1 controls NF-Kappa-B activation and the transcription of genes involved in cell survival. Through SHC1 and SH2B1 controls a Ras-PI3 kinase-AKT1 signaling cascade that is also regulating survival. In absence of ligand and activation, may promote cell death, making the survival of neurons dependent on trophic factors. Isoform TrkA-III. Resistant to NGF, it constitutively activates AKT1 and NF-kappa-B and is unable to activate the Ras-

MAPK signaling cascade. Antagonizes the anti-proliferative NGF-NTRK1 signaling that promotes neuronal precursors differentiation. Isoform TrkA-III promotes angiogenesis and has oncogenic activity when overexpressed.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

What is this antibody validated in?
Anti-Pan Trk antibody [EP1058Y] (ab76291) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunoprecipitation (IP), Immunohistochemistry (IHC-P), Immunocytochemistry/immunofluorescence (ICC/IF), ELISA in Human, Mouse, Rat samples.

What is the molecular weight of Pan Trk?
Anti-Pan Trk [EP1058Y] (ab76291) specifically detects a band for Pan Trk (UniProt: P04629) at a molecular weight of 87kDa.

Trusted by the scientific community
Anti-Pan Trk [EP1058Y] (ab76291) was first used in a scientific publication in 2009 and has been cited over 50 times in peer-reviewed journals.

Reviewed by scientists
Anti-Pan Trk [EP1058Y] (ab76291) has over 10 independent reviews from customers.

Other related products
We have a range of other formats of antibody clone [EP1058Y] also available for your convenience: ab76291, Carrier free - ab188825, Alexa Fluor® 488 - ab194321, Alexa Fluor® 647 - ab194322, PE - ab209443, APC - ab310879, Alexa Fluor® 594 - ab311720, Alexa Fluor® 568 - ab312996, Alexa Fluor® 555 - ab313201, Alexa Fluor® 750 - ab321722

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Trial sizes available!
Test your antibody or perform pre-screening before committing to a larger quantity. Sold in 20µl. Discover our selection of trial-size antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Pan Trk also known as Pan-tropomyosin receptor kinases are receptors that belong to the neurotrophin receptor family including TrkA TrkB and TrkC. They typically express in neural tissues and play a role in neuronal development and function. The mass of Pan Trk can vary as it encompasses several related proteins rather than a single unit. The variant forms are present in both the central and peripheral nervous systems. Researchers often use tags like Pan Trk IHc 555 Pan and Alexa Pan to identify different forms and monitor their expression patterns.
Biological function summary	Pan Trk receptors play a vital role in the survival development and function of neurons by mediating the action of neurotrophins. They participate as part of a receptor complex activated by ligand binding which triggers autophosphorylation. These receptors modulate various processes like neuronal survival and differentiation. Pan Trk signals generally initiate upon binding neurotrophins leading to multiple intracellular events.
Pathways	Pan Trk receptors are central players in signaling pathways such as the MAPK/ERK and PI3K/AKT pathways. These pathways significantly impact cell survival and proliferation. Pan Trk often interacts with proteins like SHC and GRB2 to transmit signals downstream efficiently. These interactions are important for linking the surface receptor activation to the intracellular responses that govern cell growth and survival.
Associated diseases and disorders	Dysregulation or mutations in Pan Trk pathways contribute to neurodegenerative diseases and cancers. For example in neuroblastoma altered Pan Trk expression can modify cell survival signals resulting in tumor growth. These receptors also relate to Alzheimer's disease where Pan Trk dysfunction can affect neuronal resilience and memory pathways. In these disorders Pan Trk associates with various proteins including Tau which can disrupt normal neuronal processes.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

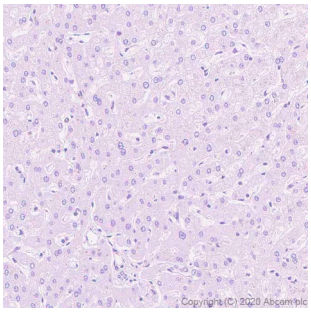
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

21 product images

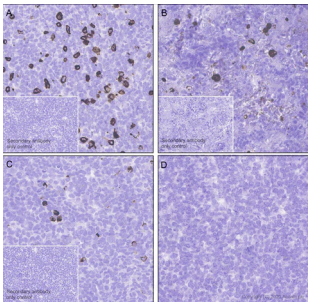


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Pan Trk antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling Pan Trk with purified ab76291 at 1/1000. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Heat mediated antigen retrieval was performed using Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 minutes. Sections were counterstained with hematoxylin. Negative control using PBS instead of primary antibody. **Negative control:** No staining on human liver.

The section was incubated with ab76291 for 30 mins at room temperature. The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument.

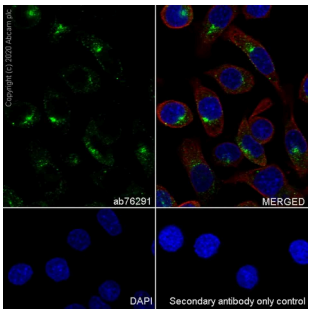


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Pan Trk antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of (A) His-human TrkA overexpression 293T whole cell pellet, (B) His-human TrkB overexpression 293T whole cell pellet, (C) His-human TrkC overexpression 293T whole cell pellet and (D) HEK-293T transfected with empty plasmid labelling Pan Trk with purified ab76291 at 1/1000. Heat mediated antigen

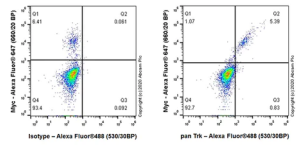
retrieval was performed using Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 minutes. Sections were counterstained with hematoxylin.
Positive staining on (A) His-human TrkA overexpression 293T whole cell pellet, (B) His-human TrkB overexpression 293T whole cell pellet and (C) His-human TrkC overexpression 293T whole cell pellet.
No staining on (D) HEK-293T transfected with empty plasmid.
The section was incubated with ab76291 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument



Immunocytochemistry/ Immunofluorescence - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Pan Trk antibody

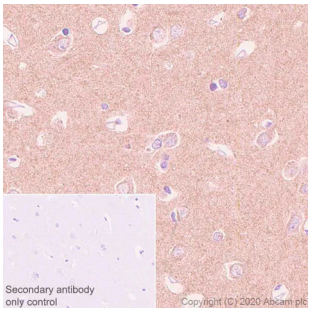
Immunocytochemistry/immunofluorescence analysis of SH-SY5Y (Human neuroblastoma epithelial cell) labeling pan Trk with ab76291 at 1/100 dilution (7 µg/mL). ab150077, AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/mL) was used as the secondary antibody. Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% TritonX-100. DAPI (blue) was used as nuclear counterstain. Cells were counterstained with ab195889, anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 (2.5 µg/mL).
Confocal image showing cytoplasmic staining in SH-SY5Y cell line.



Flow Cytometry (Intracellular) - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Flow Cytometry (Intracellular) staining using rabbit Anti-Pan Trk antibody

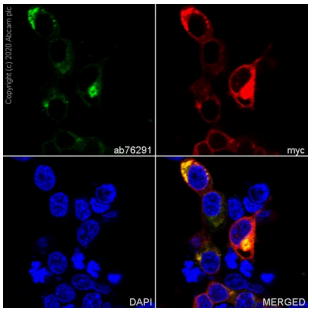
Intracellular Flow Cytometry analysis of293T (human embryonic kidney epithelial cell) transfected with TrkB overexpression construct labeling Pan Trk with ab76291 at 1/700 dilution (0.1 µg) (Right). The cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor®488, ab150077) at 1/2000 dilution was used as the secondary antibody.Isotype control/colour: Rabbit monoclonal IgG (ab172730) (Left).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Pan Trk antibody

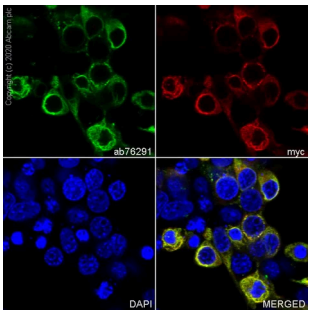
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cerebrum tissue labelling Pan Trk with purified ab76291 at 1/1000. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Heat mediated antigen retrieval was performed using Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 minutes. Sections were counterstained with hematoxylin. Negative control using PBS instead of primary antibody.
Positive staining on human cerebrum.
The section was incubated with ab76291 for 30 mins at room temperature. The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument.



Immunocytochemistry/ Immunofluorescence - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Pan Trk antibody

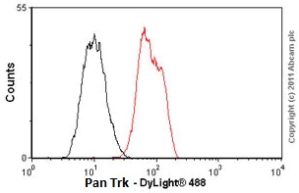
Immunocytochemistry/immunofluorescence analysis of TrkC- overexpressed 293T (human embryonic kidney epithelial cell) labelled with the pan Trk antibody ab76291 at 1/1000 dilution (0.7 µg/mL). ab150077, AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/mL) was used as the secondary antibody. Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% TritonX-100. DAPI (blue) was used as nuclear counterstain. Cells were counterstained with Myc-Tag (9B11) Mouse mAb (Alexa Fluor® 647 Conjugate) at 1/200 (2.5 µg/mL).
Confocal image showing cytoplasmic staining in 293T cells transfected with a myc-tagged hTrkC expression vector.



Immunocytochemistry/ Immunofluorescence - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Pan Trk antibody

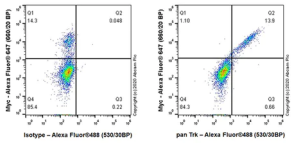
Immunocytochemistry/immunofluorescence analysis of TrkB- overexpressed 293T (human embryonic kidney epithelial cell) labelled with the pan Trk antibody ab76291 at 1/1000 dilution (0.7 µg/mL). ab150077, AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/mL) was used as the secondary antibody. Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% TritonX-100. DAPI (blue) was used as nuclear counterstain. Cells were counterstained with Myc-Tag (9B11) Mouse mAb (Alexa Fluor® 647 Conjugate) at 1/200 (2.5 µg/mL).
Confocal image showing cytoplasmic staining in 293T cells transfected with a myc-tagged hTrkB expression vector.



Flow Cytometry (Intracellular) - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Flow Cytometry (Intracellular) staining using rabbit Anti-Pan Trk antibody

Overlay histogram showing SH-SY5Y (human neuroblastoma cell line from bone marrow) cells stained with unpurified ab76291 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab76291, 1/50 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit monoclonal IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in SH-SY5Y cells fixed with methanol (5 min) used under the same conditions.Please note that Abcam do not have data for use of this antibody on non-fixed cells. We welcome any customer feedback.

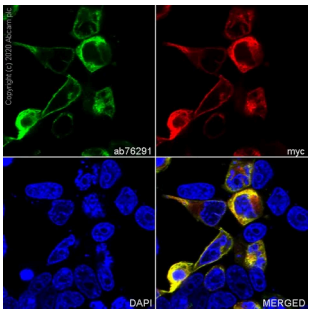


Flow Cytometry (Intracellular) - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Flow Cytometry (Intracellular) staining using rabbit Anti-Pan Trk antibody

Intracellular Flow Cytometry analysis of293T (human embryonic kidney epithelial cell) transfected with TrkA overexpression construct labeling Pan Trk with ab76291 at 1/700 dilution (0.1 µg)

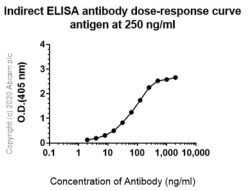
(Right). The cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.Isotype control/colour: Rabbit monoclonal IgG (ab172730) (Left).



Immunocytochemistry/ Immunofluorescence - Anti-Pan Trk antibody [EP1058Y] (ab76291)

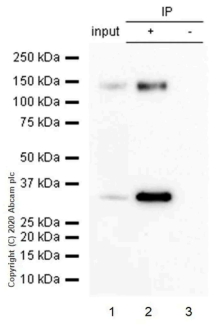
Pan Trk Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Pan Trk antibody

Immunocytochemistry/immunofluorescence analysis of TrkA- overexpressed 293T (human embryonic kidney epithelial cell) labelled with the pan Trk antibody ab76291 at 1/1000 dilution (0.7 µg/mL). ab150077, AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/mL) was used as the secondary antibody. Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% TritonX-100. DAPI (blue) was used as nuclear counterstain. Cells were counterstained with Myc-Tag (9B11) Mouse mAb (Alexa Fluor® 647 Conjugate) at 1/200 (2.5 µg/mL).
Confocal image showing cytoplasmic staining in 293T cells transfected with a myc-tagged hTrkA expression vector.



Indirect ELISA - Anti-Pan Trk antibody [EP1058Y] (ab76291)

ELISA analysis of Human TrkA recombinant protein at 250 ng/mL with ab76291. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.



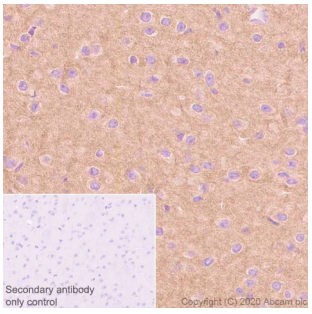
Immunoprecipitation - Anti-Pan Trk antibody [EP1058Y] (ab76291)

ab76291 at 1/40 immunoprecipitating Pan Trk in human brain tissue lysate observed at 145 kDa.
Lane 1 (input): Human brain tissue lysate (10µg)
Lane 2 (+): ab76291+ human brain tissue lysate.
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab76291 in human brain lysate
For western blotting, ab76291 at 1/1000 dilution (0.7 µg/mL) and VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 were used.

The 30 kDa band is an intracellular fragment, and the 140 kDa observed MW which is higher than the predicted one is due to the glycosylation modification. (refer to ab189903).

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

All lanes:
Immunoprecipitation - Anti-Pan Trk antibody [EP1058Y] (ab76291)

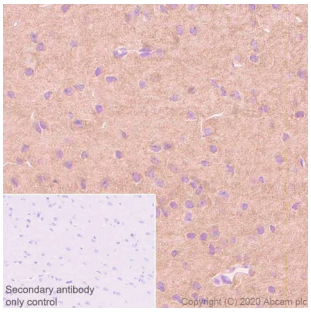


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Pan Trk antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cerebrum tissue labelling Pan Trk with purified ab76291 at 1/1000. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Heat mediated antigen retrieval was performed using Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20

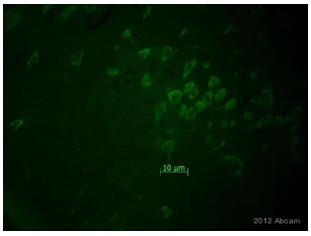
minutes. Sections were counterstained with hematoxylin. Negative control using PBS instead of primary antibody.
Positive staining on mouse cerebrum.
The section was incubated with ab76291 for 30 mins at room temperature. The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Pan Trk antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cerebrum tissue labelling Pan Trk with purified ab76291 at 1/1000. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Heat mediated antigen retrieval was performed using Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 minutes. Sections were counterstained with hematoxylin. Negative control using PBS instead of primary antibody.
Positive staining on rat cerebrum.
The section was incubated with ab76291 for 30 mins at room temperature. The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument.

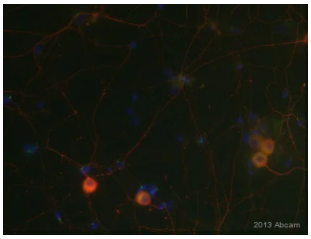


This image is courtesy of an anonymous customer review.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Pan Trk antibody

Unpurified ab76291 staining Pan Trk in murine brain tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections).
Tissue was fixed with formaldehyde, permeabilized with 0.1% Saponin/PBS and blocked with 4% serum for 30 minutes at 25°C, antigen retrieval was by heat mediation with a citrate buffer. Samples were incubated with primary antibody (1/150 in blocking buffer) for 16 hours at 4°C. A FITC-conjugated goat anti-rabbit polyclonal IgG (1/100) was used as the secondary antibody.

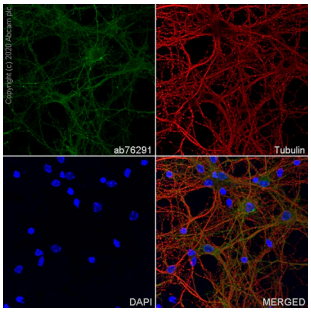


This image is courtesy of a customer review submitted by Franziska Denk.

Immunocytochemistry/ Immunofluorescence - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Pan Trk antibody

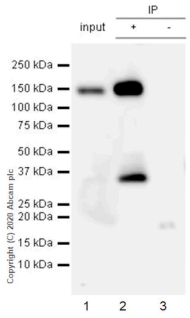
ICC/IF image of Pan Trk staining on culture of mouse DRG neurons using unpurified ab76291 (1/100). The cells were fixed using formaldehyde and permeabilized using 0.2% Triton X-100. The cells were blocked using 10% Goat serum for 1 hour at 22°C. Unpurified ab76291 was diluted 1/100 using PBS and incubated with the cells for 30 mins at 22°C. The secondary antibody used was Goat polyclonal to Rabbit IgG conjugated to Alexa Fluor® 488 (1/1000). Neuron was stained using Beta III tubulin antibody (Alexa Fluor® 647)



Immunocytochemistry/ Immunofluorescence - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Pan Trk Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Pan Trk antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neuron cells labelling Pan Trk with ab76291 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).



Immunoprecipitation - Anti-Pan Trk antibody [EP1058Y] (ab76291)

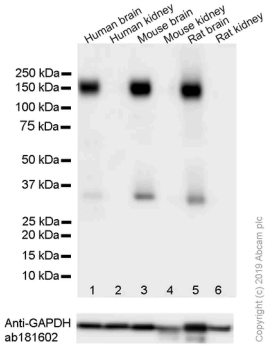
ab76291 at 1/40 immunoprecipitating Pan Trk in mouse brain tissue lysate observed at 145 kDa.
Lane 1 (input): Mouse brain tissue lysate (10µg)
Lane 2 (+): ab76291+ mouse brain tissue lysate.
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab76291 in Mouse brain lysate
For western blotting, ab76291 at 1/1000 dilution (0.7 µg/mL) and VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 were used.

The 30 kDa band is an intracellular fragment, and the 140 kDa observed MW which is higher than the predicted one is due to the glycosylation modification. (refer to ab189903).

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

All lanes:
Immunoprecipitation - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Exposure time: 23s



Western blot - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Blocking/Diluting buffer and concentration: 5% NFDM/TBST
All lanes:
Western blot - Anti-Pan Trk antibody [EP1058Y] (ab76291) at 1/1000 dilution

Lane 1:
Human brain lysates at 20 µg

Lane 2:
Human kidney lysates at 20 µg

Lane 3:
Mouse brain lysates at 20 µg

Lane 4:
Mouse kidney lysates at 20 µg

Lane 5:
Rat brain lysates at 20 µg

Lane 6:
Rat kidney lysates at 20 µg

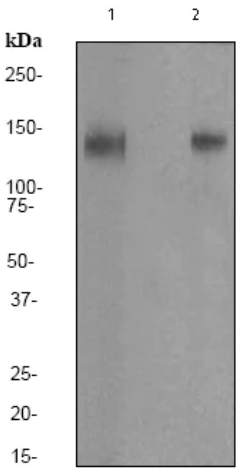
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 87 kDa

Observed band size: 120 kDa

Exposure time: 4s



Western blot - Anti-Pan Trk antibody [EP1058Y] (ab76291)

All lanes:
Western blot - Anti-Pan Trk antibody [EP1058Y] (ab76291) at 1/5000 dilution

Lane 1:
Rat brain tissue lysate (untreated) at 10 µg

Lane 2:
Rat brain tissue lysate (treated with AP) at 10 µg

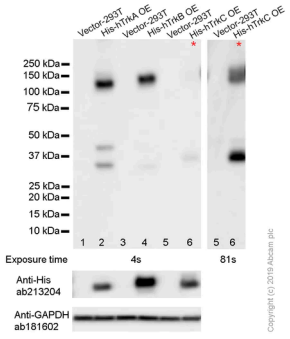
Secondary

Lane 1:
HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

Lane 2:
HRP-conjugate goat anti-rabbit IgG at 1/2000 dilution

Predicted band size: 87 kDa

Observed band size: 145 kDa



Western blot - Anti-Pan Trk antibody [EP1058Y] (ab76291)

Blocking/Diluting buffer and concentration: 5% NFDM/TBST
This antibody has relatively lower affinity to TrkC compared to TrkA and TrkB.

All lanes:
Western blot - Anti-Pan Trk antibody [EP1058Y] (ab76291) at 1/1000 dilution

Lanes 1, 3 and 5:
Empty vector over expression 293T whole cell lysates at 20 µg

Lane 2:
His-human TrkA overexpression 293T whole cell lysates at 20 µg

Lane 4:
His-human TrkB overexpression 293T whole cell lysates at 20 µg

Lane 6:
His-human TrkC overexpression 293T whole cell lysates at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 87 kDa

Observed band size: 120 kDa

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