abcam

Product datasheet

Anti-TrkC antibody [EPR22959-40] ab240651

Recombinant RabMAb

14 Images

Overview

Product name Anti-TrkC antibody [EPR22959-40]

Rabbit monoclonal [EPR22959-40] to TrkC **Description**

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, IP

Unsuitable for: Flow Cyt, Flow Cyt (Intra), ICC/IF or IHC-Fr

Species reactivity Reacts with: Mouse, Rat, Human

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

Positive control WB: Human hypothalamus tissue lysate, Human cerebellum, Human hypothalamus, Mouse brain,

Rat brain, Mouse cerebellum, Rat cerebellum, 293T transfected with human TrkC expression

vector containing a myc-His-tag®, whole cell lysate. IHC-P: Human cerebrum, Human

astrocytoma, Mouse cerebrum, Rat colon, HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with TrkC expression vector containing a

myc-His-tag®. IP: Mouse brain, Rat brain tissue lysate.

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: 7.2

Preservative: 0.01% Sodium azide

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

Purity Protein A purified

Clonality Monoclonal

Clone number EPR22959-40

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab240651 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
WB		1/1000. Predicted molecular weight: 94 kDa.
IHC-P		1/200. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/30.

Application notes Is unsuitable for Flow Cyt, Flow Cyt (Intra), ICC/IF or IHC-Fr.

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Function Receptor for neurotrophin-3 (NT-3). This is a tyrosine-protein kinase receptor. Known substrates

for the trk receptors are SHC1, PI-3 kinase, and PLCG1. The different isoforms do not have

identical signaling properties.

Tissue specificity Widely expressed but mainly in nervous tissue. Isoform B is expressed at higher levels in adult

brain than in fetal brain.

Sequence similaritiesBelongs 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 protein kinase domain.

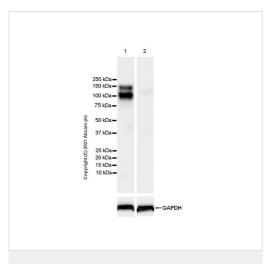
Post-translational

modifications

Ligand-mediated auto-phosphorylation.

Cellular localization Membrane.

Images



Western blot - Anti-TrkC antibody [EPR22959-40] (ab240651)

All lanes : Anti-TrkC antibody [EPR22959-40] (ab240651) at 1/1000 dilution

Lane 1 : Human hypothalamus tissue lysate at 20 µg

Lane 2: Human liver tissue lysate at 40 µg

Secondary

 $\begin{tabular}{ll} \textbf{All lanes:} Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution \end{tabular}$

Predicted band size: 94 kDa

Observed band size: 145,100 kDa

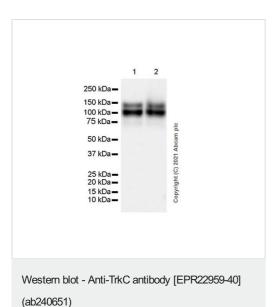
Blocking and diluting buffer and concentration: 5% NFDM/TBST

The observed MW are consistent with what has been described in

the literature (PMID: 17828769).

Negative control: liver (PMID: 7823156).

Exposure time: 15 seconds



All lanes : Anti-TrkC antibody [EPR22959-40] (ab240651) at 1/1000 dilution

Lane 1: Human cerebellum tissue lysate

Lane 2: Human hypothalamus tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG (HRP) with minimal cross-reactivity with human lgG at 1/2000 dilution

Predicted band size: 94 kDa

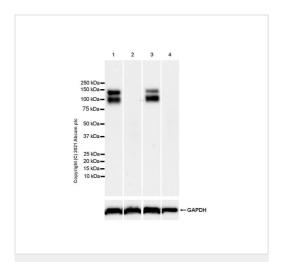
Observed band size: 145,100 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

The observed MW are consistent with what has been described in

the literature (PMID: 17828769).

Exposure time: 8 seconds



Western blot - Anti-TrkC antibody [EPR22959-40] (ab240651)

All lanes : Anti-TrkC antibody [EPR22959-40] (ab240651) at 1/1000 dilution

Lane 1: Mouse brain tissue lysate at 20 µg

Lane 2 : Mouse liver tissue lysate at 40 μg

Lane 3 : Rat brain tissue lysate at 20 μg

Lane 4 : Rat liver tissue lysate at 40 μg

Secondary

All lanes : Goat Anti-Rabbit $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$ at 1/100000 dilution

Predicted band size: 94 kDa

Observed band size: 145,100 kDa

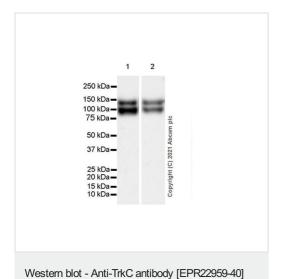
Blocking and diluting buffer and concentration: 5% NFDM/TBST

The observed MW are consistent with what has been described in

the literature (PMID: 17828769).

Negative control: liver (PMID: 7823156).

Exposure time: 37 seconds



(ab240651)

All lanes: Anti-TrkC antibody [EPR22959-40] (ab240651) at 1/1000 dilution

Lane 1: Mouse cerebellum tissue lysate

Lane 2: Rat cerebellum tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

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

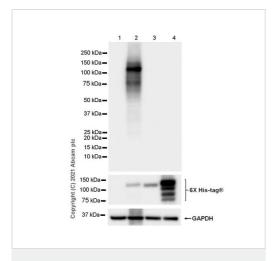
Predicted band size: 94 kDa

Observed band size: 145,100 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

The observed MW are consistent with what has been described in the literature (PMID: 17828769).

Exposure time: 37 seconds



Western blot - Anti-TrkC antibody [EPR22959-40] (ab240651)

All lanes: Anti-TrkC antibody [EPR22959-40] (ab240651) at 1/1000 dilution

Lane 1: 293T (human embryonic kidney) transfected with an empty vector (vector control) containing a myc-His-tag®, whole cell lysate

Lane 2: 293T transfected with human TrkC expression vector containing a myc-His-tag®, whole cell lysate

Lane 3: 293T transfected with human TrkA expression vector containing a myc-His-tag®, whole cell lysate

Lane 4: 293T transfected with human TrkB expression vector containing a myc-His-tag®, whole cell lysate

Lysates/proteins at 20 µg per lane.

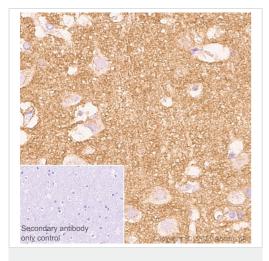
Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at

Predicted band size: 94 kDa **Observed band size:** 145 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST This antibody does not cross-react with human TrkA and TrkB.

Exposure time: 5.5 seconds



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TrkC antibody
[EPR22959-40] (ab240651)

Immunohistochemical analysis of paraffin-embedded Human cerebrum tissue labelling TrkC with ab240651 at 1/200 (2.645 ug/ml) dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining in human cerebrum. The section was incubated with ab240651 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

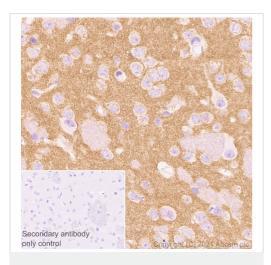


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TrkC antibody
[EPR22959-40] (ab240651)

Immunohistochemical analysis of paraffin-embedded Human astrocytoma tissue labelling TrkC with ab240651 at 1/200 (2.645 ug/ml) dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining in human astrocytoma. The section was incubated with ab240651 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

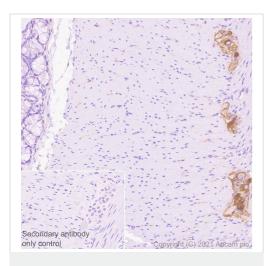


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TrkC antibody
[EPR22959-40] (ab240651)

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labelling TrkC with ab240651 at 1/1000 (0.529 ug/ml) dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining in mouse cerebrum. The section was incubated with ab240651 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

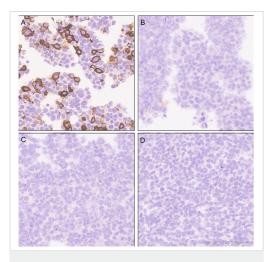


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TrkC antibody
[EPR22959-40] (ab240651)

Immunohistochemical analysis of paraffin-embedded Rat colon tissue labelling TrkC with ab240651 at 1/1000 (0.529 ug/ml) dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining on myenteric plexus of rat colon. The section was incubated with ab240651 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TrkC antibody
[EPR22959-40] (ab240651)

Immunohistochemical analysis of paraffin-embedded HEK-293T tissue labelling TrkC with ab240651 at 1/1000 (0.529 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on (A) HEK-293T transfected with TrkC expression vector. No staining on (B) HEK-293T transfected with a TrkA expression vector, (C) HEK-293T transfected with TrkB expression vector and (D) HEK-293T transfected with empty vector. The section was incubated with ab240651 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Panel A: HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with TrkC expression vector containing a myc-His-tag®

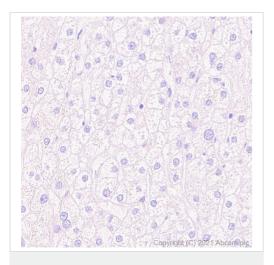
Panel B: HEK-293T transfected with TrkA vector containing a myc-His-tag®.

Panel C: HEK-293T transfected with TrkB vector containing a myc-His-tag®.

Panel D: HEK-293T transfected with empty vector containing a myc-His-tag®

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



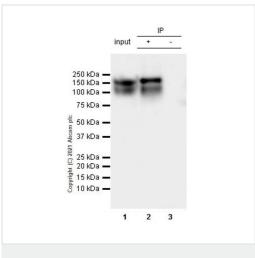
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TrkC antibody
[EPR22959-40] (ab240651)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labelling TrkC with ab240651 at 1/200 (2.645 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

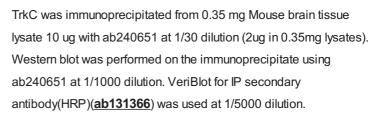
Negative control: No staining in human liver. The section was incubated with ab240651 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunoprecipitation - Anti-TrkC antibody [EPR22959-40] (ab240651)



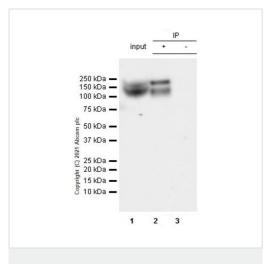
Lane 1: Mouse brain tissue lysate 10 ug

Lane 2: ab240651 IP in Mouse brain tissue lysate

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab240651 in mouse brain tissue lysate

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

Exposure time: 24 seconds



Immunoprecipitation - Anti-TrkC antibody [EPR22959-40] (ab240651)

TrkC was immunoprecipitated from 0.35 mg Rat brain tissue lysate 10 ug with ab240651 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab240651 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

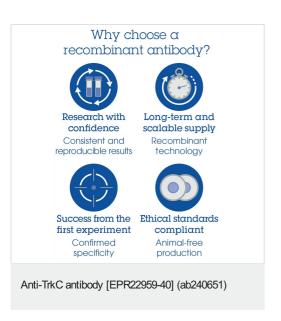
Lane 1: Rat brain tissue lysate 10 ug

Lane 2: ab240651 IP in Rat brain tissue lysate

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab240651 in rat brain tissue lysate

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

Exposure time: 24 seconds



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