abcam

Product datasheet

Anti-TPH2 antibody [EPR19191] - BSA and Azide free ab240286



8 Images

Overview

Product name Anti-TPH2 antibody [EPR19191] - BSA and Azide free

Description Rabbit monoclonal [EPR19191] to TPH2 - BSA and Azide free

Host species Rabbit

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

Species reactivity Reacts with: Mouse, Rat

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

Positive control IHC-Fr: Mouse cerebrum and brainstem tissue. IHC-P: Mouse and rat brainstem tissue. IP: Mouse

brain lysate.

General notes ab240286 is the carrier-free version of ab184505.

> 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.

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

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.

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.

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**.

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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 EPR19191

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab240286 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		Use at an assay dependent concentration. Detects a band of approximately 56 kDa (predicted molecular weight: 56 kDa).
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.
IHC-Fr		Use at an assay dependent concentration.

Target

Tissue specificity Brain specific.

Pathway Aromatic compound metabolism; serotonin biosynthesis; serotonin from L-tryptophan: step 1/2.

Involvement in disease Genetic variation in TPH2 may influence susceptibility to major depressive disorder (MDD)

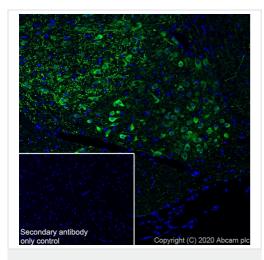
[MIM:608516].

Defects in TPH2 are the cause of susceptibility to attention deficit-hyperactivity disorder type 7 (ADHD7) [MIM:613003]. ADHD is a neurobehavioral developmental disorder and is primarily characterized by the co-existence of attentional problems and hyperactivity, with each behavior occurring infrequently alone. Note=Naturally occurring variants of TPH2 with impaired enzyme activity could cause deficiency of serotonin production and result in an increased risk of

developing behavioral disorders.

Sequence similaritiesBelongs to the biopterin-dependent aromatic amino acid hydroxylase family.

Contains 1 ACT domain.



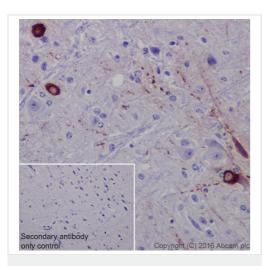
Immunohistochemistry (Frozen sections) - Anti-TPH2 antibody [EPR19191] - BSA and Azide free (ab240286)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse cerebrum tissue labeling TPH2 with ab184505 at 1/500 dilution followed by ab150077 Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) at 1/1000 (2 ug/ml) dilution (Green). Positive staining on mouse cerebrum. is observed. The nuclear counterstain was DAPI (Blue).

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

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab184505).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPH2 antibody

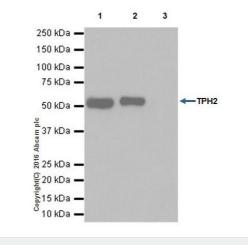
[EPR19191] - BSA and Azide free (ab240286)

Immunohistochemical analysis of paraffin-embedded Mouse brainstem tissue labeling TPH2 with <u>ab184505</u> at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution. Cytoplasm staining on dorsal raphe cells of mouse brainstem [PMID: 22912815]. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab184505).

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



Immunoprecipitation - Anti-TPH2 antibody [EPR19191] - BSA and Azide free (ab240286)

TPH2 was immunoprecipitated from 0.35 mg of Mouse brain lysate with ab184505 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab184505 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution. Lane 2: ab184505 IP in Mouse brain lysate.

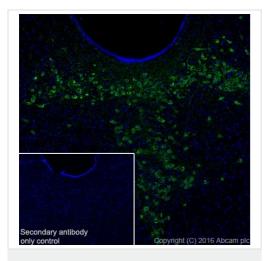
Lane 1: Mouse brain lysate, 10µg (Input).

Lane 3: Rabbit lgG,monoclonal [EPR25A]-lsotype Control (ab172730) instead of ab184505 in Mouse brain lysate.

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

Exposure time: 10 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab184505).

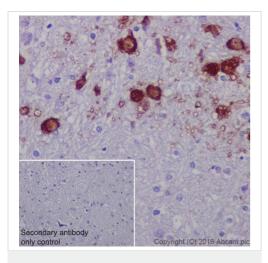


Immunohistochemistry (Frozen sections) - Anti-TPH2 antibody [EPR19191] - BSA and Azide free (ab240286)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen Mouse brainstem tissue labeling TPH2 with ab184505 at 1/500 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Cytoplasm staining on dorsal raphe cells of mouse brainstem [PMID: 22912815]. The nuclear counterstain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab150077 secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab184505).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPH2 antibody

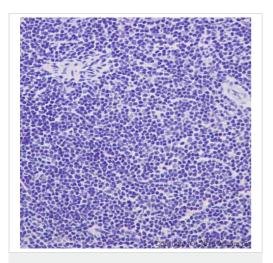
[EPR19191] - BSA and Azide free (ab240286)

Immunohistochemical analysis of paraffin-embedded Rat brainstem tissue labeling TPH2 with <u>ab184505</u> at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution. Cytoplasm staining on dorsal raphe cells of rat brainstem [PMID: 22912815]. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab184505).

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

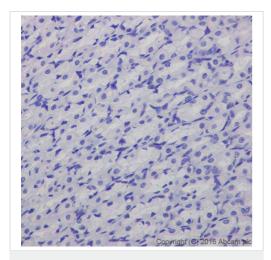


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPH2 antibody
[EPR19191] - BSA and Azide free (ab240286)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling TPH2 with **ab184505** at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. No staining on mouse spleen. Counter stained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab184505).

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-TPH2 antibody

[EPR19191] - BSA and Azide free (ab240286)

Immunohistochemical analysis of paraffin-embedded Rat stomach tissue labeling TPH2 with <u>ab184505</u> at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution. No staining on rat stomach. Counter stained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab184505).

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



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free (ab240286)

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