

Product datasheet

Anti-DARPP32 antibody [EP720Y] ab40801

Recombinant RabMAb

★★★★☆ 11 Abreviews 76 References 10 Images

Overview

Product name	Anti-DARPP32 antibody [EP720Y]
Description	Rabbit monoclonal [EP720Y] to DARPP32
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB, IHC-P, IP
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Pig
Immunogen	Synthetic peptide within Human DARPP32 aa 1-100 (N terminal). The exact sequence is proprietary. Database link: Q9UD71 (Peptide available as ab189245)
Positive control	IHC-P: Human breast adenocarcinoma tissue and colon tissue. Mouse and rat cerebral cortex tissue. ICC/IF: Mouse brain tissue. WB: Rat hippocampus and brain tissue lysate. Mouse cerebral cortex tissue lysate. Human fetal brain lysate. IP: Rat brain whole cell lysate. IHC-Wm: Mouse brain tissue. IHC-Fr: Pig brain tissue.
General notes	<p>Protein phosphatase 1 regulatory subunit 1B (PPP1R1B) is a protein that in humans is encoded by the PPP1R1B gene. This gene, also known as DARPP-32, has a role as a dopamine- and cyclic AMP-regulated phosphoprotein. As such PPP1R1B affects dopamine glutamate and adenosine; and potentially has a role in conditions such as schizophrenia and Parkinson's disease.</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 <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p>

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: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP720Y
Isotype	IgG

Applications

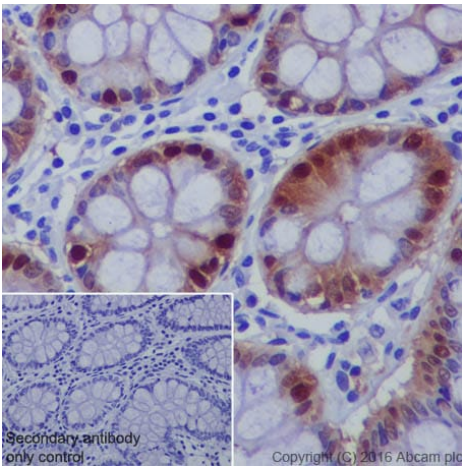
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab40801 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★☆ (2)	1/50 - 1/100.
WB	★★★★★ (3)	1/1000. Detects a band of approximately 32 kDa (predicted molecular weight: 32 kDa). For unpurified use at 1/5000 - 1/50 000.
IHC-P		1/50. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols .
IP		1/20. For unpurified use at 1/50.

Target

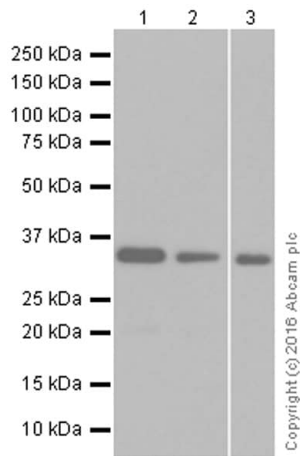
Function	Inhibitor of protein-phosphatase 1.
Sequence similarities	Belongs to the protein phosphatase inhibitor 1 family.
Post-translational modifications	Dopamine- and cyclic AMP-regulated neuronal phosphoprotein. Phosphorylation of Thr-34 is required for activity.
Cellular localization	Cytoplasm.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DARPP32 antibody [EP720Y] (ab40801)

Immunohistochemical analysis of paraffin-embedded human colon sections labelling DARPP32 with purified ab40801 at dilution of 1/50. The secondary antibody used was ab97051; a goat anti-rabbit IgG H&L (HRP) at dilution of 1/500. The sample was counterstained with hematoxylin. Antigen retrieval was performed using EDTA Buffer; pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Western blot - Anti-DARPP32 antibody [EP720Y] (ab40801)

All lanes : Anti-DARPP32 antibody [EP720Y] (ab40801) at 1/50000 dilution (purified)

Lane 1 : Rat hippocampus tissue lysate

Lane 2 : Rat brain tissue lysate

Lane 3 : Mouse cerebral cortex tissue lysate

Lysates/proteins at 20 µg per lane.

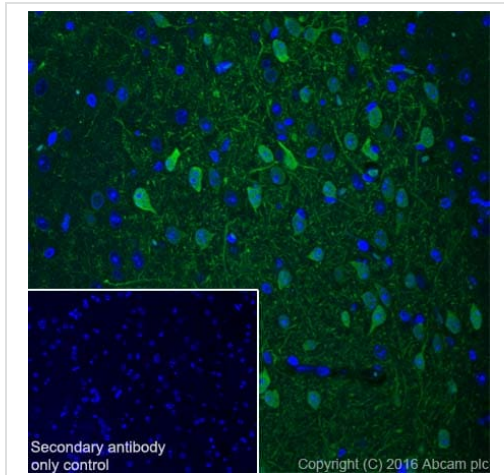
Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 32 kDa

Observed band size: 32 kDa

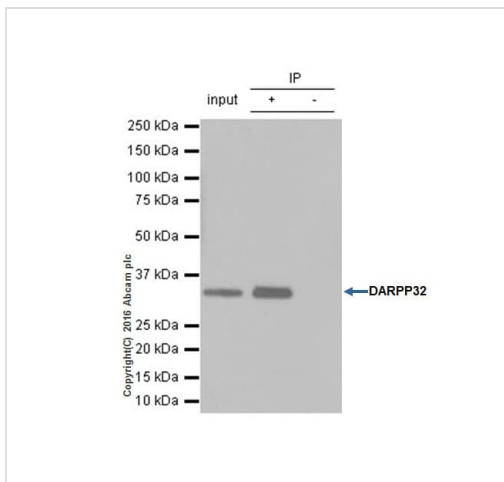
Blocking/Diluting buffer 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-DARPP32 antibody [EP720Y] (ab40801)

Immunocytochemistry/Immunofluorescence analysis of mouse brain tissue labelling DARPP32 with purified ab40801 at 1/100 (3.4 µg/mL). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.2% Triton X-100. Antigen retrieval was performed with Heated citrate solution (10mM citrate PH 6.0 + 0.05% Tween-20). [ab150077](#), Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000, 2 µg/mL) was used as the secondary antibody.

Secondary Only Control: PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Immunoprecipitation - Anti-DARPP32 antibody [EP720Y] (ab40801)

ab40801 at 1/20 immunoprecipitating DARPP32 in rat brain whole cell lysate observed at 32 KDa (lanes 1 and 2).

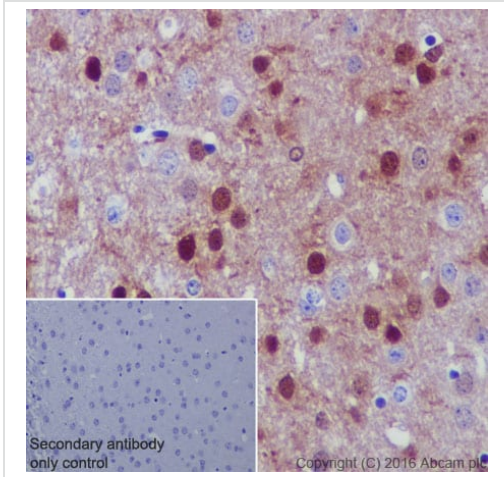
Lane 1: Rat brain whole cell lysate 10µg.

Lane 2: ab40801 IP in rat brain whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab40801 in rat brain whole cell lysate.

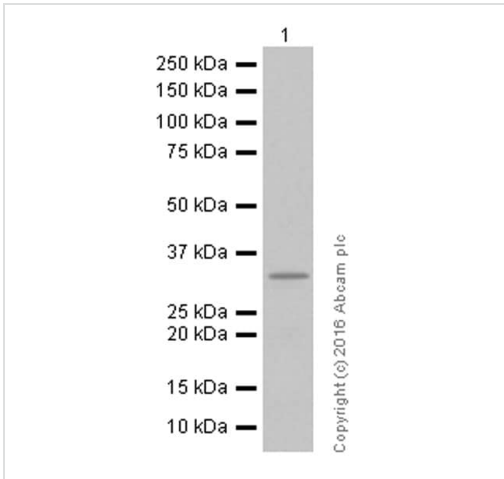
For western blotting, [ab131366](#) VeriBlot for IP (HRP) was used for detection (1/1000).

Blocking/Dilution buffer and concentration: 5% NFDm/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DARPP32 antibody [EP720Y] (ab40801)

Immunohistochemical analysis of paraffin-embedded mouse cerebral cortex sections labelling DARPP32 with purified ab40801 at dilution of 1/50. The secondary antibody used was ab97051; a goat anti-rabbit IgG H&L (HRP) at dilution of 1/500. The sample was counterstained with hematoxylin. Antigen retrieval was performed using EDTA Buffer; pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Western blot - Anti-DARPP32 antibody [EP720Y] (ab40801)

Anti-DARPP32 antibody [EP720Y] (ab40801) at 1/1000 dilution (purified) + Human fetal brain lysate at 15 µg

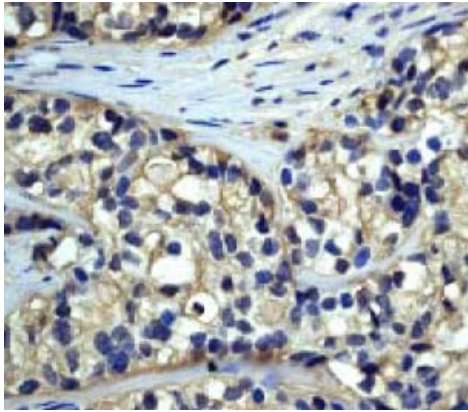
Secondary

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 32 kDa

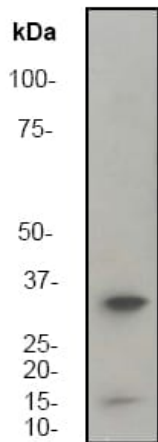
Observed band size: 32 kDa

Blocking/Diluting buffer 5% NFDm/TBST



Immunohistochemical analysis of human breast adenocarcinoma sections labelling DARPP32 with unpurified ab40801 at a dilution of 1/50.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DARPP32 antibody [EP720Y] (ab40801)

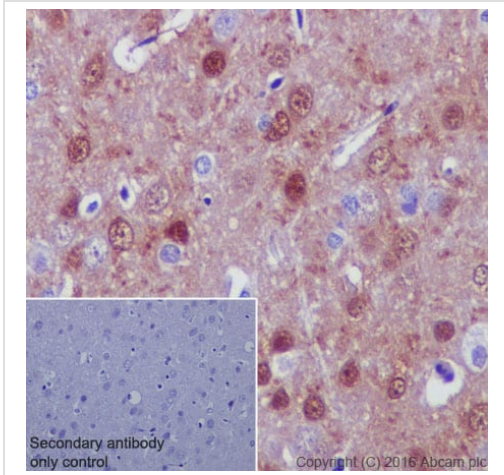


Anti-DARPP32 antibody [EP720Y] (ab40801) at 1/50000 dilution (unpurified) + Rat brain lysate at 10 μ g

Predicted band size: 32 kDa

Observed band size: 32 kDa





Western blot - Anti-DARPP32 antibody [EP720Y] (ab40801)



Immunohistochemical analysis of paraffin-embedded rat cerebral cortex sections labelling DARPP32 with purified ab40801 at dilution of 1/50. The secondary antibody used was [ab97051](#); a goat anti-rabbit IgG H&L (HRP) at dilution of 1/500. The sample was counterstained with hematoxylin. Antigen retrieval was performed using EDTA Buffer; pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DARPP32 antibody [EP720Y] (ab40801)

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-DARPP32 antibody [EP720Y] (ab40801)

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

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