

Product datasheet

Anti-DARPP32 antibody [EP720Y] ab40801

Recombinant **RabMAb**

★★★★☆ 8 Abreviews 41 References 11 Images

Overview

Product name	Anti-DARPP32 antibody [EP720Y]
Description	Rabbit monoclonal [EP720Y] to DARPP32
Host species	Rabbit
Tested applications	Suitable for: IHC - Wholemount, IHC-Fr, Flow Cyt, ICC/IF, WB, IHC-P, IP
Species reactivity	Reacts with: Mouse, Rat, Human, 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	Rat brain, cerebral cortex and hippocampus tissue; Mouse brain and cerebral cortex tissue; Human breast adenocarcinoma; Human fetal brain tissue lysate; Human colon tissue; pig brain tissue.
General notes	Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents 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. This product is a recombinant rabbit monoclonal antibody.

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

Our [Abpromise guarantee](#) covers the use of **ab40801** in the following tested applications.

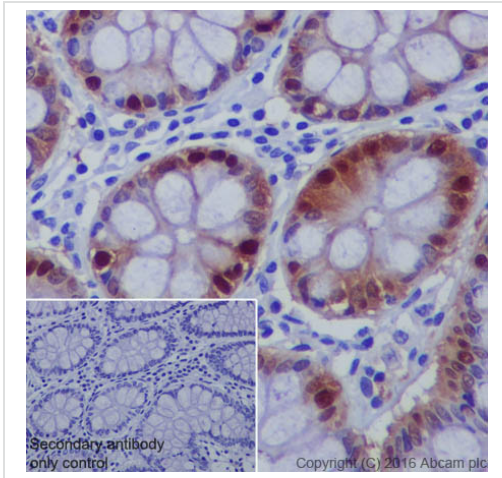
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC - Wholemout		Use at an assay dependent concentration. PubMed: 21394212
IHC-Fr	★★★★★	1/7500.
Flow Cyt	★★★★☆	Use at an assay dependent concentration. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★	1/50 - 1/100.
WB	★★★★★	1/1000. Detects a band of approximately 32 kDa (predicted molecular weight: 32 kDa).Can be blocked with DARPP32 peptide (ab189245) . For unpurified use at 1/5000 - 1/50 000.
IHC-P		1/50. See IHC antigen retrieval protocols .
IP		1/20. For unpurified use at 1/50.

Target

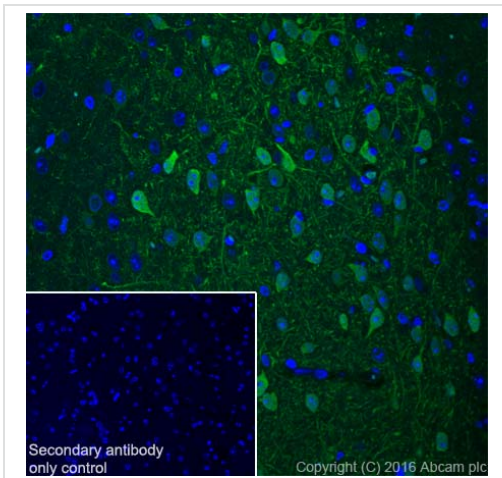
Function	Inhibitor of protein-phosphatase 1.
Sequence similarities	Belongs to the protein phosphatase inhibitor 1 family.
Post-translational modifications	Dopamine- and cyclic AMP-regulated neuronal phosphoprotein. Phosphorylation of Thr-34 is required for activity.
Cellular localization	Cytoplasm.

Images



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.

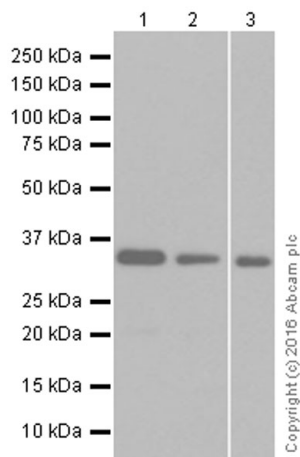
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DARPP32 antibody [EP720Y] (ab40801)



Immunocytochemistry/Immunofluorescence analysis of mouse brain tissue lysate 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.

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



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

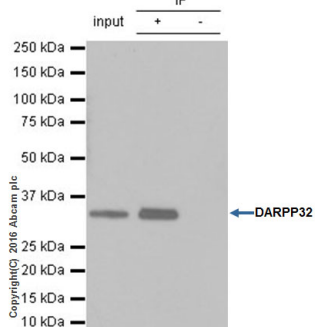
Lysates/proteins at 20 µg per lane.

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



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

Blocking/Diluting buffer 5% NFDm/TBST

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

Lane 1 (input): Rat brain whole cell lysate 10µg

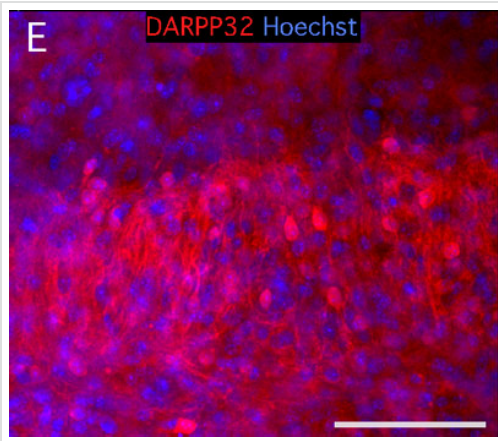
Lane 2 (+): ab40801 + Rat brain whole cell lysate.

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 as the secondary antibody (1/1000).

Blocking buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm /TBST.

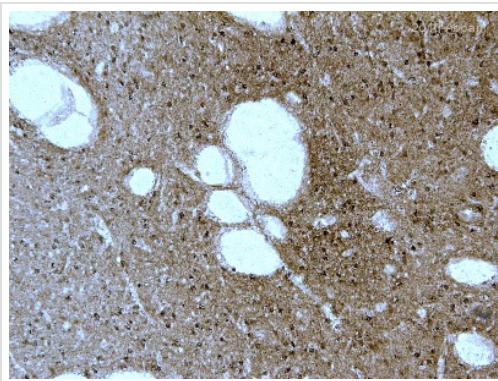


IHC - Wholemout - Anti-DARPP32 antibody

[EP720Y] (ab40801)

Image from Tønnesen J et al., PLoS One. 2011 Mar 4;6(3):e17560. Fig 1.; doi:10.1371/journal.pone.0017560; March 4, 2011, PLoS ONE 6(3): e17560.

Immunohistochemical analysis of murine brain tissue, staining DARPP32 (red) with unpurified ab40801. Slices were fixed in paraformaldehyde and blocked with 5% horse serum and 0.25% Triton X-100. Samples were incubated with primary antibody (1/200) for 15 hours.

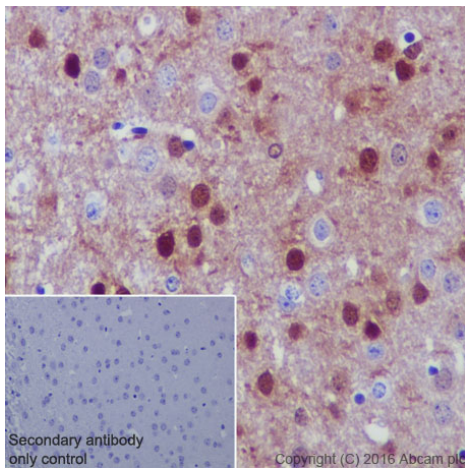


Immunohistochemistry (Frozen sections) - Anti-

DARPP32 antibody [EP720Y] (ab40801)

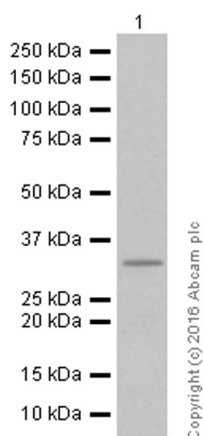
This image is courtesy of an Abreview submitted by Dr Marian Hruska-Plochan

ab40801 (unpurified) staining DARPP32 in pig brain tissue sections by IHC-Fr (formaldehyde-fixed Frozen sections). Tissue was fixed with formaldehyde (4%), permeabilized with Triton X-100 and blocked with 0.2% milk for 30 minutes at 24°C. Samples were incubated with primary antibody (1/7500 in TBS + 1% Triton X-100 + 0.2% milk) for 24 hours at 4°C. A Biotin-conjugated Sheep polyclonal to rabbit IgG, dilution 1/400, was used as secondary antibody. Endogenous peroxidase was blocked with 0.3% H₂O₂ in methanol for 20 minutes.



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

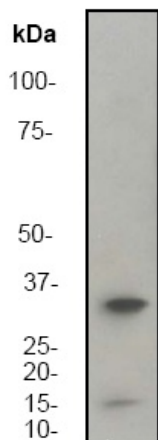
Secondary

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

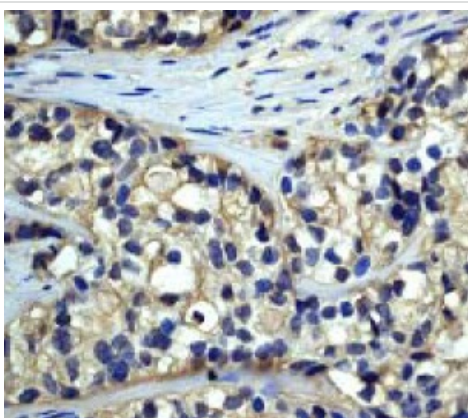


Western blot - Anti-DARPP32 antibody [EP720Y] (ab40801)

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

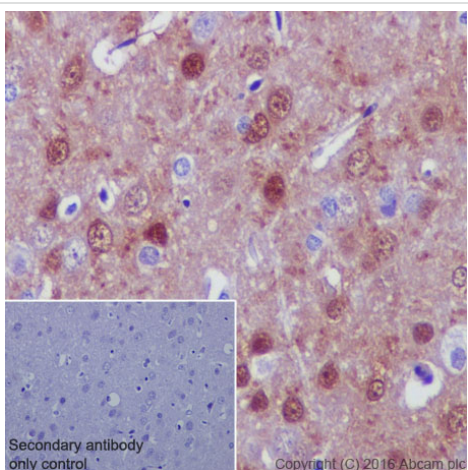
Predicted band size: 32 kDa

Observed band size: 32 kDa



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)



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)

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