abcam

Product datasheet

Anti-DDAH1 antibody [EPR13921] ab181859





6 Images

Overview

Product name Anti-DDAH1 antibody [EPR13921]

Description Rabbit monoclonal [EPR13921] to DDAH1

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), IHC-P, WB, IP

Reacts with: Human Species reactivity

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

Positive control WB: A431, HuVEC, HepG2 and 293 cell lysates. IP: 293 cells. Flow Cyt (intra): 293 cells. IHC-P:

Human hepatocellular carcinoma tissue.

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 long

term. Avoid freeze / thaw cycle.

Storage buffer Preservative: 0.01% Sodium azide

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

Purity Protein A purified

Clonality Monoclonal Clone number EPR13921

Isotype ΙgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab181859 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
Flow Cyt (Intra)		1/30. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
IHC-P		1/50. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000 - 1/10000. Detects a band of approximately 37 kDa (predicted molecular weight: 31 kDa).
IP		1/40.

Target

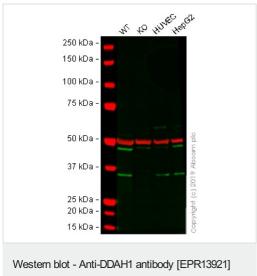
Function Hydrolyzes N(G),N(G)-dimethyl-L-arginine (ADMA) and N(G)-monomethyl-L-arginine (MMA) which

act as inhibitors of NOS. Has therefore a role in the regulation of nitric oxide generation.

Tissue specificity Detected in brain, liver, kidney and pancreas, and at low levels in skeletal muscle.

Sequence similarities Belongs to the DDAH family.

Images



(ab181859)

All lanes: Anti-DDAH1 antibody [EPR13921] (ab181859) at 1/10000 dilution

Lane 1: Wild-type A431 cell lysate

Lane 2: DDAH1 knockout A431 cell lysate

Lane 3: HUVEC (Human umbilical vein endothelial cell line) whole

cell lysate

Lane 4: Hep G2 (Human liver hepatocellular carcinoma cell line)

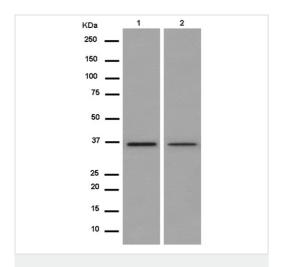
whole cell lysate

Lysates/proteins at 40 µg per lane.

Performed under reducing conditions.

Predicted band size: 31 kDa Observed band size: 37 kDa **Lanes 1 - 4:** Merged signal (red and green). Green - ab181859 observed at 37 kDa. Red - loading control, <u>ab7291</u> (Mouse anti-Alpha Tubulin [DM1A] observed at 55kDa.

ab181859 was shown to react with DDAH1 in wild-type A431 cells in Western blot. Loss of signal was observed when DDAH1 knockout sample was used. Wild-type A431 and DDAH1 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% Milk in TBS-T (0.1% Tween®) before incubation with ab181859 and ab7291 (Mouse anti-Alpha Tubulin [DM1A] overnight at 4°C at a 1 in 10000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-DDAH1 antibody [EPR13921] (ab181859)

All lanes : Anti-DDAH1 antibody [EPR13921] (ab181859) at 1/5000 dilution

Lane 1 : 293 cell lysate

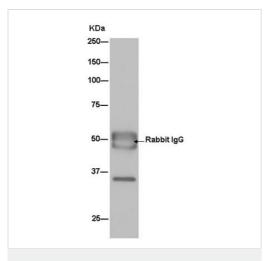
Lane 2 : HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

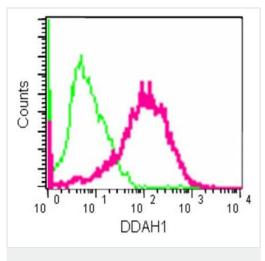
All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 31 kDa **Observed band size:** 37 kDa



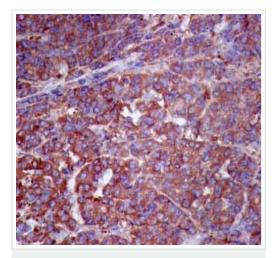
Western blot analysis of 293 cell lysate immunoprecipitated using ab181859 at 1/40 dilution. Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugate secondary antibody was used at 1/1000 dilution.

Immunoprecipitation - Anti-DDAH1 antibody [EPR13921] (ab181859)



Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed 293 cells labeling DDAH1 with ab181859 at 1/30 dilution (red), compared to a Rabbit monoclonal lgGisotype control (green), followed by Goat anti-Rabbit lgG (FITC) secondary antibody at 1/150 dilution.





Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-DDAH1 antibody
[EPR13921] (ab181859)

Immunohistochemical analysis of paraffin-embedded Human hepatocellular carcinoma tissue labeling DDAH1 with ab181859 at 1/50 dilution, followed by prediluted HRP Polymer for Rabbit lgG. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



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