

Product datasheet

Anti-Aconitase 2 antibody [6F12BD9] ab110321

KO VALIDATED

★★★★★ [4 Abreviews](#) [28 References](#) [5 Images](#)

Overview

Product name	Anti-Aconitase 2 antibody [6F12BD9]
Description	Mouse monoclonal [6F12BD9] to Aconitase 2
Host species	Mouse
Tested applications	Suitable for: ICC/IF, WB, Flow Cyt, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Tissue, cells or virus. This information is proprietary to Abcam and/or its suppliers.
Positive control	HepG2, HeLa, H9C2, and MEF cell lysates; HDFn cells and HeLa cells. Human Normal colon FFPE tissue.
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p> <p>Product was previously marketed under the MitoSciences sub-brand.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	<p>pH: 7.5</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: HEPES buffered saline</p>
Purification notes	ab110321 was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation. Purity: >95% by SDS-PAGE.

Clonality	Monoclonal
Clone number	6F12BD9
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab110321 in the following tested applications.

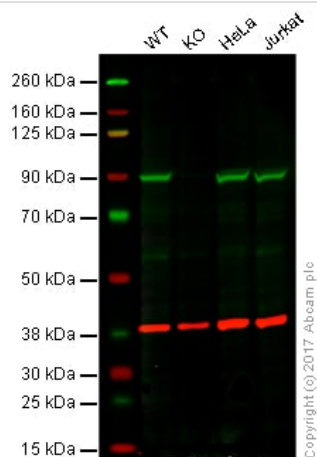
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 1 µg/ml. for 2 hours.
WB	★★★★★ (3)	Use a concentration of 1 µg/ml. Predicted molecular weight: 85 kDa.
Flow Cyt		Use a concentration of 1 µg/ml. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-P		Use a concentration of 5 µg/ml.

Target

Function	Catalyzes the isomerization of citrate to isocitrate via cis-aconitate.
Pathway	Carbohydrate metabolism; tricarboxylic acid cycle; isocitrate from oxaloacetate: step 2/2.
Sequence similarities	Belongs to the aconitase/IPM isomerase family.
Cellular localization	Mitochondrion.

Images



Western blot - Anti-Aconitase 2 antibody [6F12BD9] (ab110321)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

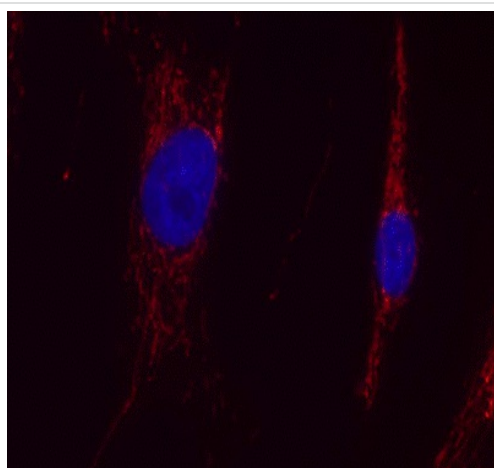
Lane 2: Aconitase 2 knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: Jurkat whole cell lysate (20 µg)

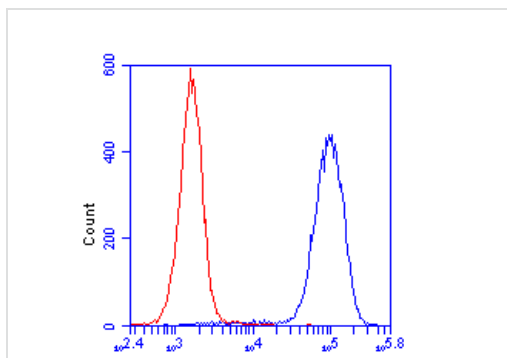
Lanes 1 - 4: Merged signal (red and green). Green - ab110321 observed at 90 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

ab110321 was shown to specifically react with Aconitase 2 in wild-type HAP1 cells as signal was lost in Aconitase 2 knockout cells. Wild-type and Aconitase 2 knockout samples were subjected to SDS-PAGE. ab110321 and **ab181602** (Rabbit anti-GAPDH loading control) were incubated overnight at 4°C at 1 µg/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed **ab216772** and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed **ab216777** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



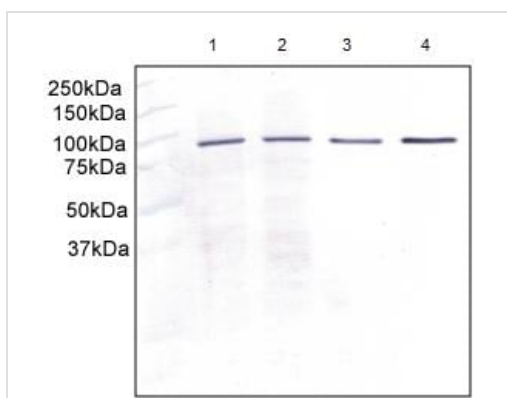
Immunocytochemistry/ Immunofluorescence - Anti-Aconitase 2 antibody [6F12BD9] (ab110321)

ab110321 at 1 µg/ml staining Aconitase 2 in HDFn cells by Immunocytochemistry (4% paraformaldehyde fixed and 0.1% Triton X-100 permeabilized) followed by Alexa Fluor® 594 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1 hour (red).



Flow Cytometry - Anti-Aconitase 2 antibody
[6F12BD9] (ab110321)

ab110321 at 1 µg/ml staining Aconitase 2 in HeLa cells by Flow Cytometry (blue). Isotype control antibody (red).



Western blot - Anti-Aconitase 2 antibody [6F12BD9]
(ab110321)

All lanes : Anti-Aconitase 2 antibody [6F12BD9] (ab110321) at 1 µg/ml

Lane 1 : HepG2 (human)

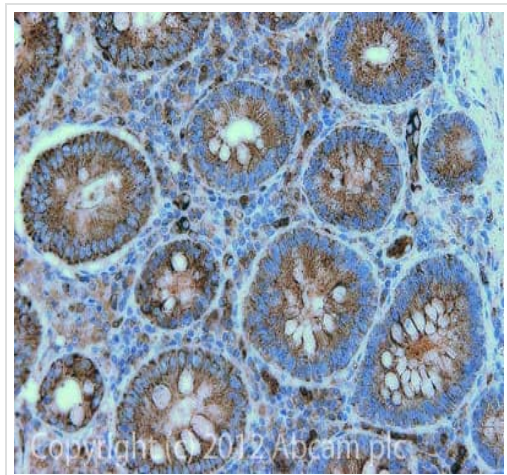
Lane 2 : HeLa (human)

Lane 3 : H9C2 (rat cardiomyocyte)

Lane 4 : MEF (mouse fibroblast)

Lysates/proteins at 20 µg per lane.

Predicted band size: 85 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-Aconitase 2 antibody
[6F12BD9] (ab110321)

IHC image of Aconitase 2 staining in Human normal colon formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab110321, 5 µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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