

Product datasheet

Anti-Aconitase 1/ACO1 antibody [EPR7226(2)] ab183721


KO VALIDATED

Recombinant

RabMAb

[1 References](#) [4 Images](#)

Overview

Product name	Anti-Aconitase 1/ACO1 antibody [EPR7226(2)]
Description	Rabbit monoclonal [EPR7226(2)] to Aconitase 1/ACO1
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human fetal liver tissue lysate, HepG2, T.T, U20S, HeLa and HEK-293 whole cell lysate
General notes	<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>

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	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR7226(2)
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab183721 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		1/1000 - 1/20000. Predicted molecular weight: 98 kDa.

Target

Function

Iron sensor. Binds a 4Fe-4S cluster and functions as aconitase when cellular iron levels are high. Functions as mRNA binding protein that regulates uptake, sequestration and utilization of iron when cellular iron levels are low. Binds to iron-responsive elements (IRES) in target mRNA species when iron levels are low. Binding of a 4Fe-4S cluster precludes RNA binding. Catalyzes the isomerization of citrate to isocitrate via cis-aconitate.

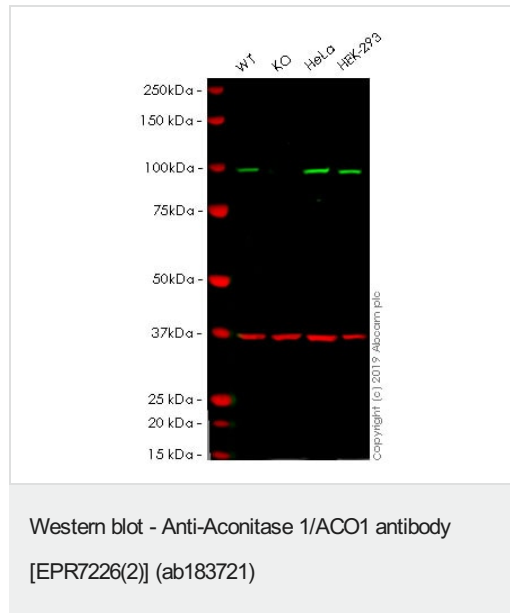
Sequence similarities

Belongs to the aconitase/IPM isomerase family.

Cellular localization

Cytoplasm.

Images



All lanes : Anti-Aconitase 1/ACO1 antibody [EPR7226(2)]
(ab183721) at 1 µg/ml

Lane 1 : Wild-type U2OS whole cell lysate

Lane 2 : ACO1 knockout U-2 OS whole cell lysate

Lane 3 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 4 : HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

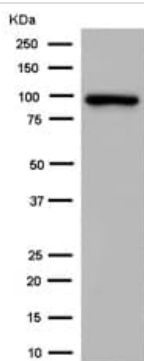
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 98 kDa

Lanes 1 -4: Merged signal (red and green). Green - ab183721 observed at 98 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab183721 was shown to specifically react with ACO1 in wild-type U2OS cells as signal was lost in ACO1 knockout cells. Wild-type and ACO1 knockout samples were subjected to SDS-PAGE. Ab183721 and [ab9484](#) (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1 ug/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.



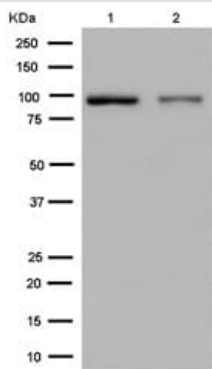
Western blot - Anti-Aconitase 1/ACO1 antibody [EPR7226(2)] (ab183721)

Anti-Aconitase 1/ACO1 antibody [EPR7226(2)] (ab183721) at 1/20000 dilution + Human fetal liver tissue lysate at 20 µg

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 98 kDa



Western blot - Anti-Aconitase 1/ACO1 antibody [EPR7226(2)] (ab183721)

All lanes : Anti-Aconitase 1/ACO1 antibody [EPR7226(2)] (ab183721) at 1/1000 dilution

Lane 1 : HepG2 cell lysate

Lane 2 : T.T cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/5000 dilution

Predicted band size: 98 kDa

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-Aconitase 1/ACO1 antibody [EPR7226(2)]
(ab183721)

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

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