


## Product datasheet

### Anti-Aconitase 2 antibody [EPR8283(B)] ab129105

KO VALIDATED Recombinant RabMAb

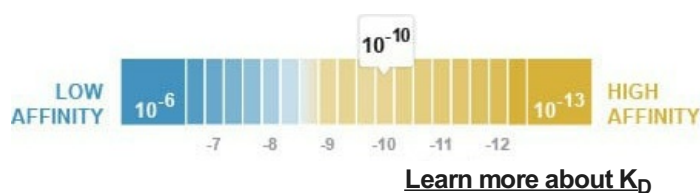
★★★★★ [3 Abreviews](#) [4 References](#) [6 Images](#)

#### Overview

Product name	Anti-Aconitase 2 antibody [EPR8283(B)]
Description	Rabbit monoclonal [EPR8283(B)] to Aconitase 2
Host species	Rabbit
Tested applications	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> IP
Species reactivity	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat 
Immunogen	Synthetic peptide within Human Aconitase 2 aa 500-600. The exact sequence is proprietary.
Positive control	HeLa, K562, Jurkat and 293T cell lysates; Human kidney tissue.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K <sub>D</sub> )	K <sub>D</sub> = 2.60 x 10 <sup>-10</sup> M



Storage buffer	pH: 7.20
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	Preservative: 0.01% Sodium azide
	Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR8283(B)
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab129105 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

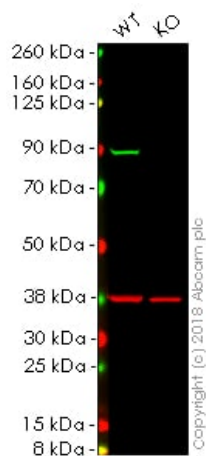
Application	Abreviews	Notes
<b>WB</b>	★★★★★ (1)	1/10000 - 1/50000. Detects a band of approximately 85 kDa (predicted molecular weight: 85 kDa).
<b>IHC-P</b>		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

**Application notes** Is unsuitable for IP.

## Target

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

## Images



Western blot - Anti-Aconitase 2 antibody  
[EPR8283(B)] (ab129105)

**All lanes :** Anti-Aconitase 2 antibody [EPR8283(B)] (ab129105) at 1/1000 dilution

**All lanes :** Wild-type HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

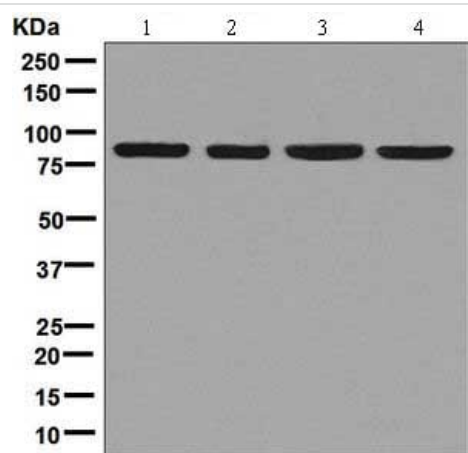
**Predicted band size:** 85 kDa

**Observed band size:** 85 kDa

**Lanes 1 - 2:** Merged signal (red and green). Green - ab129105 observed at 85 kDa. Red - loading control, [ab9484](#), observed at 37 kDa.

ab129105 was shown to specifically react with Aconitase 2 in wild-type HAP1 cells as signal was lost in Hela knockout cells. Wild-type and Hela knockout samples were subjected to SDS-PAGE.

Ab129105 and [ab9484](#) (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 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 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Aconitase 2 antibody  
[EPR8283(B)] (ab129105)

**All lanes :** Anti-Aconitase 2 antibody [EPR8283(B)] (ab129105) at 1/10000 dilution

**Lane 1 :** HeLa cell lysate

**Lane 2 :** K562 cell lysate

**Lane 3 :** Jurkat cell lysate

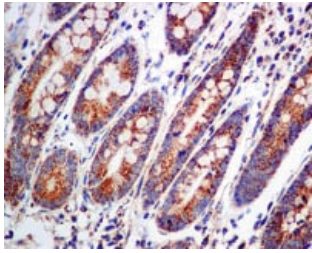
**Lane 4 :** 293T cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes :** Goat anti-Rabbit HRP at 1/2000 dilution

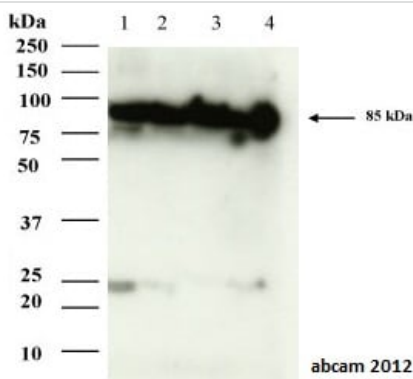
**Predicted band size:** 85 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aconitase 2 antibody [EPR8283(B)] (ab129105)

ab129105, at 1/100 dilution, staining Aconitase 2 in Paraffin-embedded Human kidney tissue by immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-Aconitase 2 antibody [EPR8283(B)] (ab129105)

This image is courtesy of an abreview submitted by Ruma Raha-Chowdhury, University Of Cambridge, United Kingdom

**All lanes :** Anti-Aconitase 2 antibody [EPR8283(B)] (ab129105) at 1/1000 dilution

**Lane 1 :** 1 month old Mouse Liver Mitochondrial fraction

**Lanes 2-3 :** 3 month old Mouse Liver Mitochondrial fraction

**Lane 4 :** 6 month old Mouse Liver Mitochondrial fraction

#### Secondary

**All lanes :** Pig Polyclonal to anti-Rabbit (HRP) at 1/3000 dilution

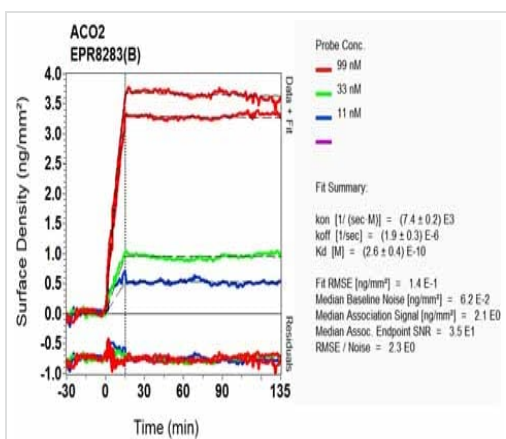
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 85 kDa

**Exposure time:** 1 minute

**Blocking:** 5% milk for 1 hour at 24°C



OL-RD Scanning - Anti-Aconitase 2 antibody  
[EPR8283(B)] (ab129105)

Equilibrium disassociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

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 2 antibody [EPR8283(B)] (ab129105)

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

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