

## Product datasheet

### Anti-ALDH2 antibody [EPR4494] ab133306

KO VALIDATED

Recombinant

RabMAb

[2 References](#) [3 Images](#)

#### Overview

<b>Product name</b>	Anti-ALDH2 antibody [EPR4494]
<b>Description</b>	Rabbit monoclonal [EPR4494] to ALDH2
<b>Host species</b>	Rabbit
<b>Specificity</b>	The antibody immunogen has 87% homology with ALDH1A2 (O94788) and ALDH1A1 (P00352). Therefore a cross-reactivity with these proteins is likely.
<b>Tested applications</b>	<b>Suitable for:</b> WB <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: SW480 and HepG2 cell lysates; Human heart, fetal liver, mouse liver, rat liver, and mouse lung lysates.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <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> For more information <a href="#">see here</a> . 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> .

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal

**Clone number**                      EPR4494

**Isotype**                              IgG

## Applications

**The Abpromise guarantee**              Our **Abpromise guarantee** covers the use of ab133306 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 - 1/10000. Predicted molecular weight: 56 kDa.

**Application notes**                      Is unsuitable for Flow Cyt, ICC/IF or IHC-P.

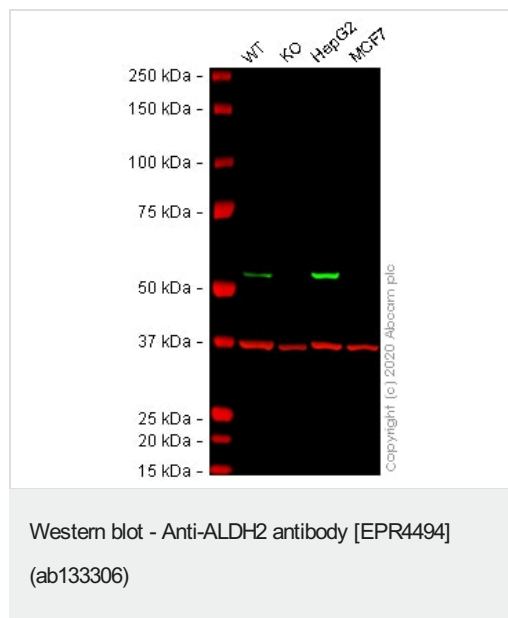
## Target

**Pathway**                                      Alcohol metabolism; ethanol degradation; acetate from ethanol: step 2/2.

**Sequence similarities**                      Belongs to the aldehyde dehydrogenase family.

**Cellular localization**                      Mitochondrion matrix.

## Images



**All lanes :** Anti-ALDH2 antibody [EPR4494] (ab133306) at 1/1000 dilution

**Lane 1 :** Wild-type SW480 (Human colorectal adenocarcinoma cell line) whole cell lysate

**Lane 2 :** ALDH2 knockout SW480 (Human colorectal adenocarcinoma cell line) whole cell lysate

**Lane 3 :** Hep G2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

**Lane 4 :** MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

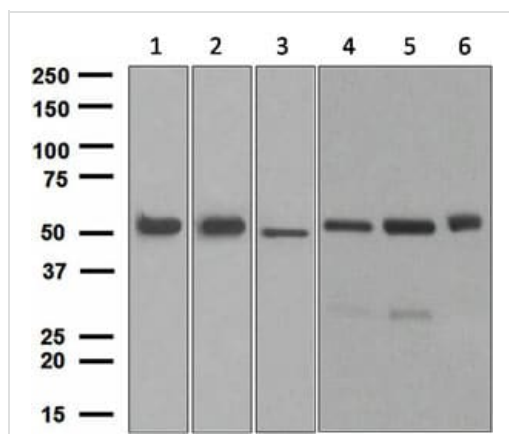
Performed under reducing conditions.

**Predicted band size:** 56 kDa

**Observed band size:** 53 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab133306 observed at 53 kDa. Red - loading control, **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

ab133306 was shown to react with ALDH2 in wild-type SW480 cells in western blot. Loss of signal was observed when ALDH2 knockout sample was used. Wild-type and ALDH2 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk before incubation with ab133306 and **ab8245** (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 1000 Dilution and a 1 in 20000 dilution respectively. Blots were incubated 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-ALDH2 antibody [EPR4494]  
(ab133306)

**All lanes :** Anti-ALDH2 antibody [EPR4494] (ab133306) at 1/1000 dilution

**Lane 1 :** HepG2 lysates

**Lane 2 :** Human heart lysates

**Lane 3 :** Fetal liver lysates

**Lane 4 :** Mouse liver lysates

**Lane 5 :** Rat liver lysates

**Lane 6 :** Mouse lung lysates

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 56 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-ALDH2 antibody [EPR4494] (ab133306)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors