

Product datasheet

Anti-AKR1C3 antibody [EPR16726] ab209899

Recombinant RabMAb

2 References 7 Images

Overview

<b>Product name</b>	Anti-AKR1C3 antibody [EPR16726]
<b>Description</b>	Rabbit monoclonal [EPR16726] to AKR1C3
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, ICC/IF, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Human fetal kidney lysate; MOLT-4, A549 and HepG2 whole cell lysates, ICC/IF: HepG2 and A549 cells. Flow Cyt (intra): A549 cells. IP: HepG2 whole cell lysate.
<b>General notes</b>	<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

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR16726
<b>Isotype</b>	IgG

## Applications

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**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab209899 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)		1/70.
WB		1/1000. Detects a band of approximately 37 kDa (predicted molecular weight: 37 kDa).
ICC/IF		1/100.
IP		1/30.

## Target

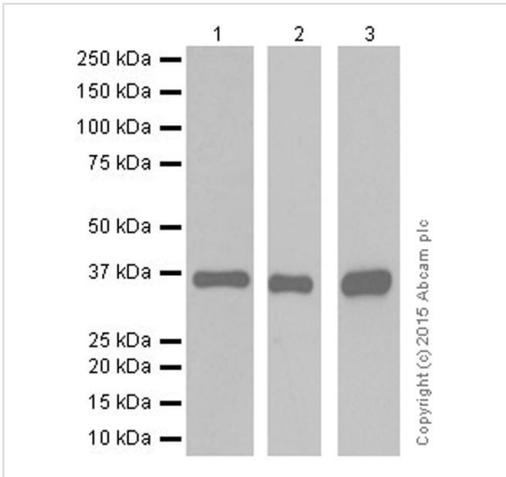
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<b>Function</b>	Catalyzes the conversion of aldehydes and ketones to alcohols. Catalyzes the reduction of prostaglandin (PG) D2, PGH2 and phenanthrenequinone (PQ) and the oxidation of 9-alpha,11-beta-PGF2 to PGD2. Functions as a bi-directional 3-alpha-, 17-beta- and 20-alpha HSD. Can interconvert active androgens, estrogens and progestins with their cognate inactive metabolites. Preferentially transforms androstenedione (4-dione) to testosterone.
<b>Tissue specificity</b>	Expressed in many tissues including adrenal gland, brain, kidney, liver, lung, mammary gland, placenta, small intestine, colon, spleen, prostate and testis. The dominant HSD in prostate and mammary gland. In the prostate, higher levels in epithelial cells than in stromal cells. In the brain, expressed in medulla, spinal cord, frontotemporal lobes, thalamus, subthalamic nuclei and amygdala. Weaker expression in the hippocampus, substantia nigra and caudate.
<b>Sequence similarities</b>	Belongs to the aldo/keto reductase family.
<b>Cellular localization</b>	Cytoplasm.

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## Images

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Western blot - Anti-AKR1C3 antibody [EPR16726] (ab209899)

**Lanes 1-2 :** Anti-AKR1C3 antibody [EPR16726] (ab209899) at 1/1000 dilution

**Lane 3 :** Anti-AKR1C3 antibody [EPR16726] (ab209899) at 1/5000 dilution

**Lane 1 :** Human fetal kidney lysate

**Lane 2 :** MOLT-4 (Human lymphoblastic leukemia cell line) whole cell lysate

**Lane 3 :** A549 (Human lung carcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

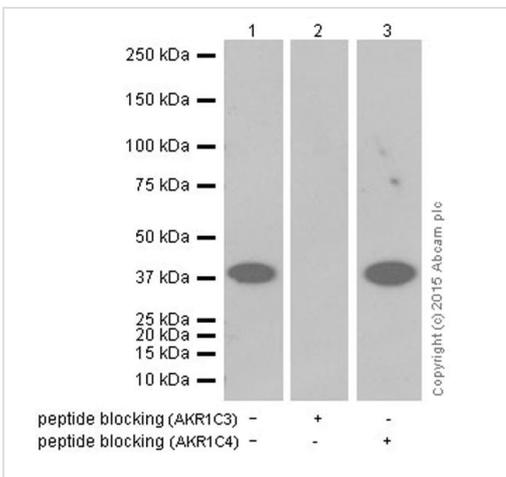
**All lanes :** Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

**Predicted band size:** 37 kDa

**Observed band size:** 37 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1/3: 2 seconds; Lane 2: 30 seconds.



Western blot - Anti-AKR1C3 antibody [EPR16726] (ab209899)

**All lanes :** Anti-AKR1C3 antibody [EPR16726] (ab209899) at 1/2000 dilution

**Lane 1 :** HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate (control)

**Lane 2 :** HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate with AKR1C3 peptide on the membrane

**Lane 3 :** HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate with AKR1C4 peptide on the membrane

Lysates/proteins at 10 µg per lane.

**Secondary**

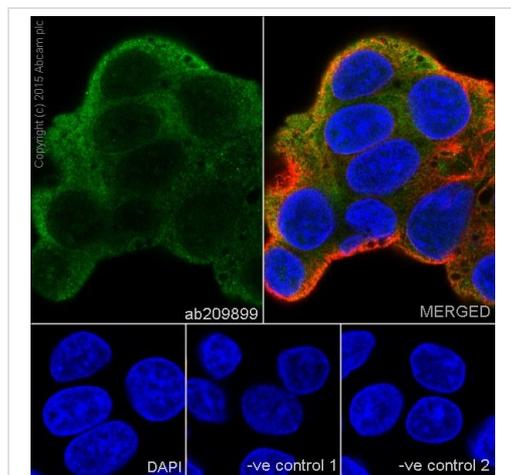
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

**Predicted band size:** 37 kDa

**Observed band size:** 37 kDa

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-AKR1C3 antibody [EPR16726] (ab209899)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling AKR1C3 with ab209899 at 1/100 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining on HepG2 cell line.

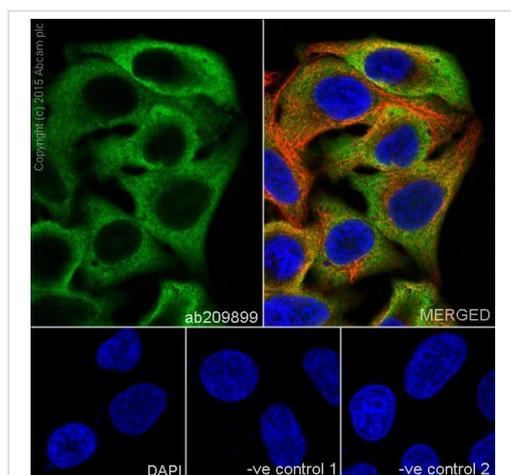
The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody - Loading Control (ab7291) at 1/1000 dilution and Goat Anti-Mouse IgG (AlexaFluor®594) preadsorbed (ab150120) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab209899 at 1/100 dilution followed by ab150120 at 1/1000 dilution.

-ve control 2: ab7291 at 1/1000 dilution followed by ab150077 at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-AKR1C3 antibody [EPR16726] (ab209899)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized A549 (Human lung carcinoma cell line) cells labeling AKR1C3 with ab209899 at 1/100 dilution, followed by Goat anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining on A549 cell line.

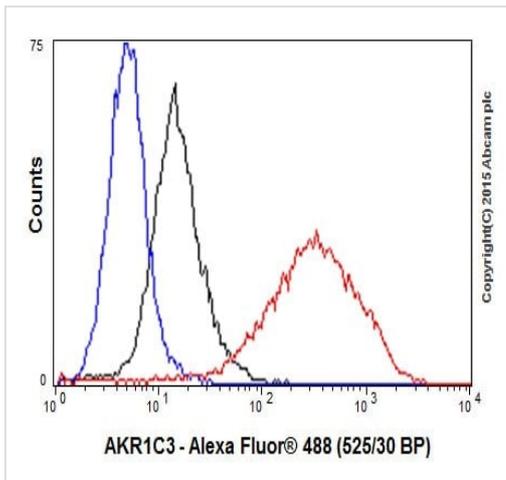
The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody - Loading Control (ab7291) at 1/1000 dilution and Goat Anti-Mouse IgG (Alexa Fluor®594) preadsorbed (ab150120) at 1/1000 dilution (red).

The negative controls are as follows:-

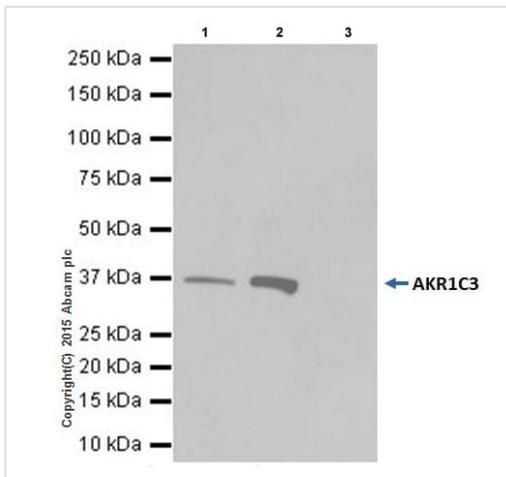
-ve control 1: ab209899 at 1/100 dilution followed by ab150120 at 1/1000 dilution.

-ve control 2: ab7291 at 1/1000 dilution followed by ab150077 at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-AKR1C3 antibody [EPR16726] (ab209899)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed A549 (Human lung carcinoma cell line) cells labeling AKR1C3 with ab209899 at 1/70 dilution (red) compared with a Rabbit IgG, monoclonal- Isotype control (ab172730) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti Rabbit IgG (Alexa Fluor® 488) at 1/500 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-AKR1C3 antibody [EPR16726] (ab209899)

AKR1C3 was immunoprecipitated from 1mg of HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate with ab209899 at 1/30 dilution.

Western blot was performed from the immunoprecipitate using ab209899 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: HepG2 whole cell lysate, 10µg (Input).

Lane 2: ab209899 IP in HepG2 whole cell lysate.

Lane 3: Rabbit IgG, monoclonal - Isotype Control (ab172730) instead of ab209899 in HepG2 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 1 second.

### 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-AKR1C3 antibody [EPR16726] (ab209899)

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

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