

Product datasheet

Anti-Leukotriene A4 hydrolase/LTA4H antibody [EPR5713] ab133512

KO VALIDATED Recombinant RabMAb[®]

[4 References](#) [7 Images](#)

Overview

Product name	Anti-Leukotriene A4 hydrolase/LTA4H antibody [EPR5713]
Description	Rabbit monoclonal [EPR5713] to Leukotriene A4 hydrolase/LTA4H
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, Flow Cyt Unsuitable for: IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Leukotriene A4 hydrolase/LTA4H aa 550-650. The exact sequence is proprietary.
Positive control	WB: HeLa, 293T, T47D and A549 cell lysates. IHC-P: Human kidney tissue. Flow Cyt: Jurkat cells.
General notes	

This product was previously labelled as Leukotriene A4 hydrolase

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information [see here](#).

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in

our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

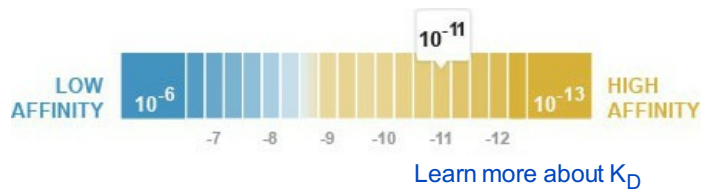
We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 5.40 x 10 ⁻¹¹ M



Storage buffer	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR5713
Isotype	IgG

Applications

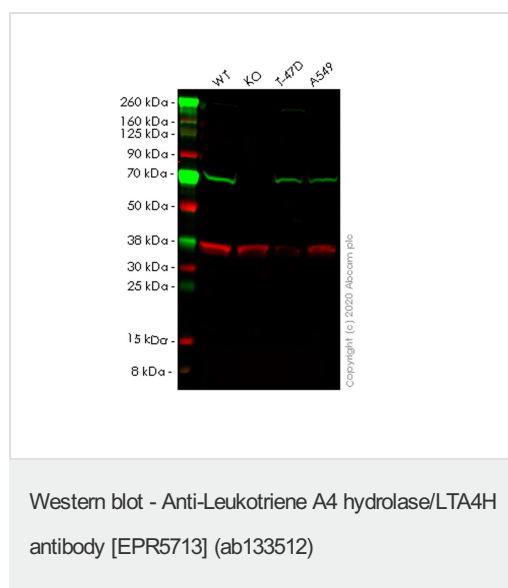
Our [Abpromise guarantee](#) covers the use of **ab133512** in the following tested applications.

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

Application	Abreviews	Notes
WB		1/10000 - 1/50000. Predicted molecular weight: 69 kDa.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application	Abreviews	Notes
Flow Cyt		1/100 - 1/1000. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
Application notes		Is unsuitable for IP.
Target		
Function		Hydrolyzes an epoxide moiety of leukotriene A4 (LTA-4) to form leukotriene B4 (LTB-4). The enzyme also has some peptidase activity.
Pathway		Lipid metabolism; leukotriene B4 biosynthesis.
Sequence similarities		Belongs to the peptidase M1 family.
Cellular localization		Cytoplasm.

Images



All lanes : Anti-Leukotriene A4 hydrolase/LTA4H antibody [EPR5713] (ab133512) at 1/1000 dilution

Lane 1 : Wild-type HEK293T cell lysate

Lane 2 : LTA4H knockout HEK293T cell lysate

Lane 3 : T-47D cell lysate

Lane 4 : A549 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

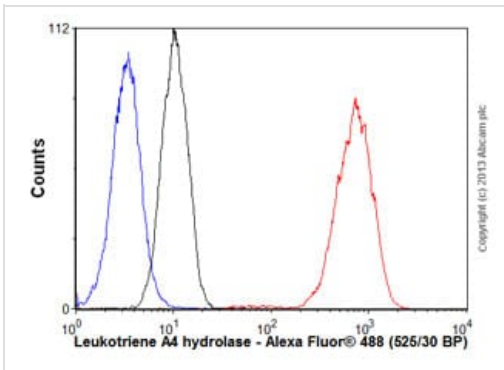
Predicted band size: 69 kDa

Observed band size: 69 kDa

Lanes 1-4: Merged signal (red and green). Green - ab133512 observed at 69 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

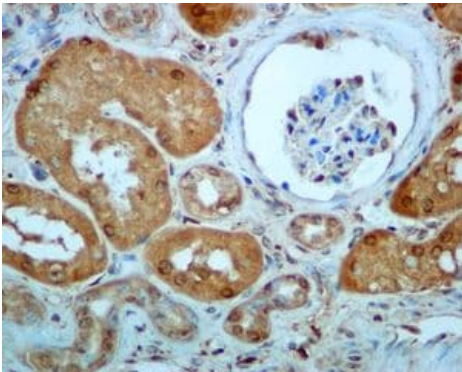
ab133512 Anti-Leukotriene A4 hydrolase/LTA4H antibody [EPR5713] was shown to specifically react with Leukotriene in wild-type HEK293T cells. Loss of signal was observed when knockout cell line [ab266467](#) (knockout cell lysate [ab258034](#)) was used. Wild-

type and Leukotriene knockout samples were subjected to SDS-PAGE. ab133512 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Flow Cytometry - Anti-Leukotriene A4 hydrolase/LTA4H antibody [EPR5713] (ab133512)

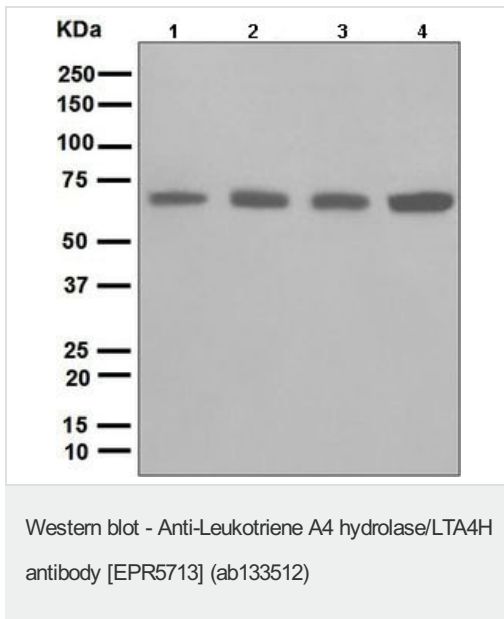
Overlay histogram showing Jurkat cells stained with ab133512 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab133512, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in Jurkat cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Leukotriene A4 hydrolase/LTA4H antibody [EPR5713] (ab133512)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labelling Leukotriene A4 hydrolase/LTA4H with ab133512 at 1/250 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



All lanes : Anti-Leukotriene A4 hydrolase/LTA4H antibody [EPR5713] (ab133512) at 1/10000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : 293T cell lysate

Lane 3 : T47D cell lysate

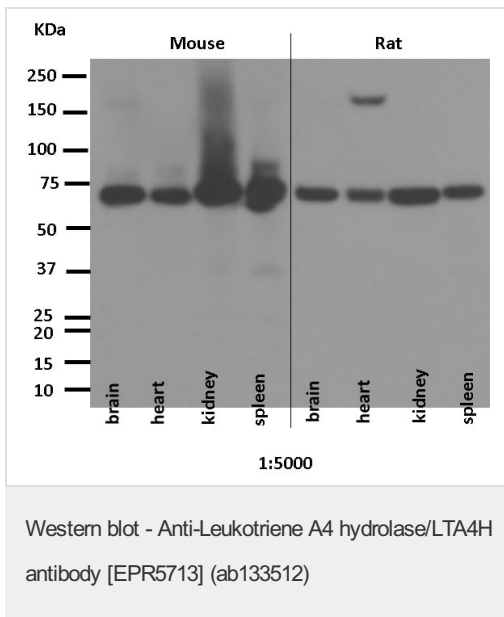
Lane 4 : A549 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 69 kDa



All lanes : Anti-Leukotriene A4 hydrolase/LTA4H antibody [EPR5713] (ab133512) at 1/5000 dilution

Lane 1 : Mouse brain tissue lysate

Lane 2 : Mouse heart tissue lysate

Lane 3 : Mouse kidney tissue lysate

Lane 4 : Mouse spleen tissue lysate

Lane 5 : Rat brain tissue lysate

Lane 6 : Rat heart tissue lysate

Lane 7 : Rat kidney tissue lysate

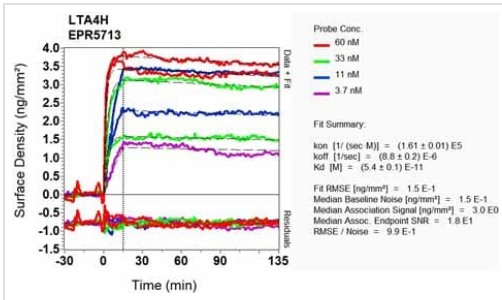
Lane 8 : Rat spleen tissue lysate

Predicted band size: 69 kDa

Observed band size: 70 kDa

[why is the actual band size different from the predicted?](#)

Exposure time: 1 minute



Equilibrium dissociation constant (K_D)

Learn more about K_D

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

OI-RD Scanning - Anti-Leukotriene A4

hydrolase/LTA4H antibody [EPR5713] (ab133512)

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-Leukotriene A4 hydrolase/LTA4H antibody [EPR5713] (ab133512)

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