

Product datasheet

Anti-Leukotriene A4 hydrolase/LTA4H antibody [EPR5713] α b133512

KO VALIDATED Recombinant RabMAb

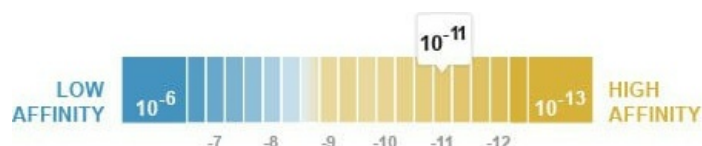
[7 References](#) [7 Images](#)

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: Flow Cyt (Intra), WB, IHC-P 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 (intra): Jurkat cells.
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 -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	$K_D = 5.40 \times 10^{-11}$ M



[Learn more about K_D](#)

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

The Abpromise guarantee 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.

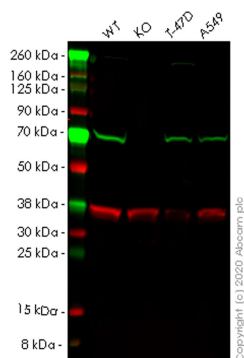
Application	Abreviews	Notes
Flow Cyt (Intra)		1/100 - 1/1000. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/10000 - 1/50000. Predicted molecular weight: 69 kDa.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application 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



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

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

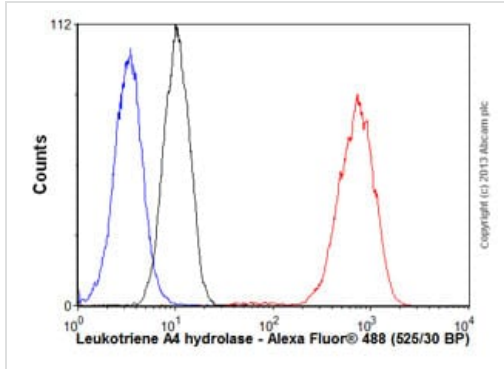
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

Predicted band size: 69 kDa

Observed band size: 69 kDa

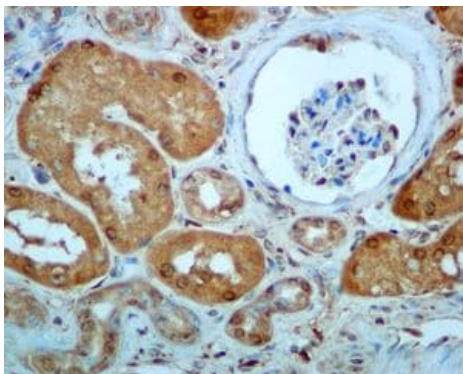
Lanes 1-4: Merged signal (red and green). Green - ab133512 observed at 69 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

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

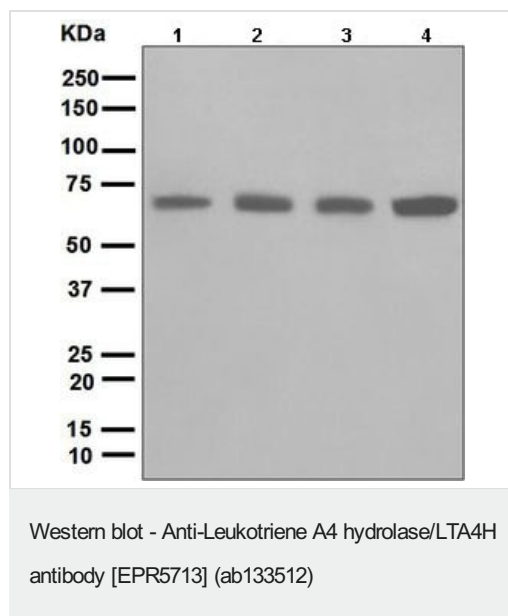
Overlay histogram showing Jurkat cells stained with ab133512 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions 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

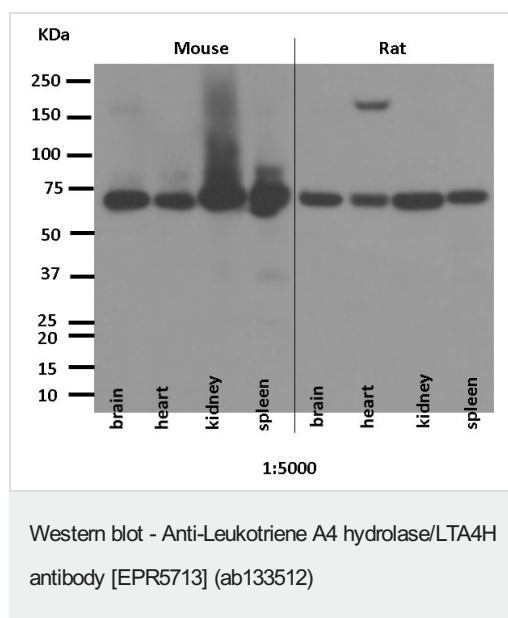
Lane 4 : A549 cell lysate

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

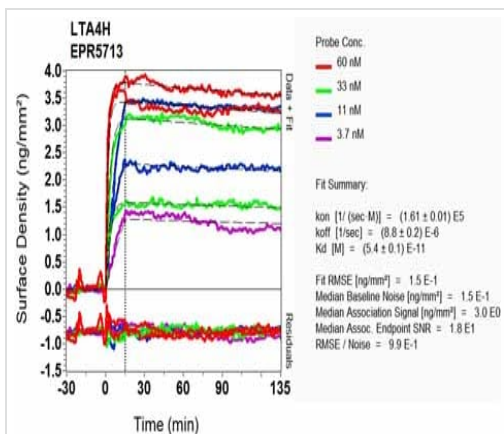
Lane 7 : Rat kidney tissue lysate

Lane 8 : Rat spleen tissue lysate

Predicted band size: 69 kDa

Observed band size: 70 kDa

Exposure time: 1 minute



OI-RD Scanning - Anti-Leukotriene A4

hydrolase/LTA4H antibody [EPR5713] (ab133512)

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

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