


Product datasheet

Anti-5 Lipoxygenase/5-LO antibody [EP6072(2)] ab169755

Recombinant RabMAb

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Overview

Product name	Anti-5 Lipoxygenase/5-LO antibody [EP6072(2)]
Description	Rabbit monoclonal [EP6072(2)] to 5 Lipoxygenase/5-LO
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Rat, Human Predicted to work with: Dog  Does not react with: Mouse
Immunogen	Synthetic peptide within Human 5 Lipoxygenase/5-LO aa 100-200. The exact sequence is proprietary. Database link: P09917
Positive control	Fetal thymus, K562 and HUVEC lysates. Human prostate and Human tonsil tissue. HUVEC cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <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 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 . We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.

Storage buffer	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP6072(2)
Isotype	IgG

Applications

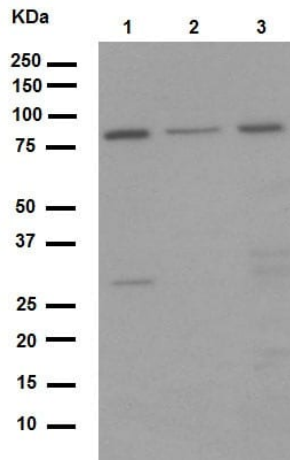
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab169755 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/2000. Predicted molecular weight: 78 kDa.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols . For unpurified use at 1/100 - 1/250.
ICC/IF		1/100.

Target

Function	Catalyzes the first step in leukotriene biosynthesis, and thereby plays a role in inflammatory processes.
Pathway	Lipid metabolism; leukotriene A4 biosynthesis.
Sequence similarities	Belongs to the lipoxygenase family. Contains 1 lipoxygenase domain. Contains 1 PLAT domain.
Post-translational modifications	Serine phosphorylation by MAPKAPK2 is stimulated by arachidonic acid. Phosphorylation on Ser-523 by PKA has an inhibitory effect. Phosphorylation on Ser-272 prevents export from the nucleus.
Cellular localization	Cytoplasm. Nucleus matrix. Nucleus membrane. Shuttles between cytoplasm and nucleus. Found exclusively in the nucleus, when phosphorylated on Ser-272. Calcium binding promotes translocation from the cytosol and the nuclear matrix to the nuclear envelope and membrane association.

Images



Western blot - Anti-5 Lipoxygenase/5-LO antibody [EP6072(2)] (ab169755)

All lanes : Anti-5 Lipoxygenase/5-LO antibody [EP6072(2)] (ab169755) at 1/1000 dilution

Lane 1 : Rat heart lysate

Lane 2 : Rat kidney lysate

Lane 3 : Rat spleen lysate

Lysates/proteins at 20 µg per lane.

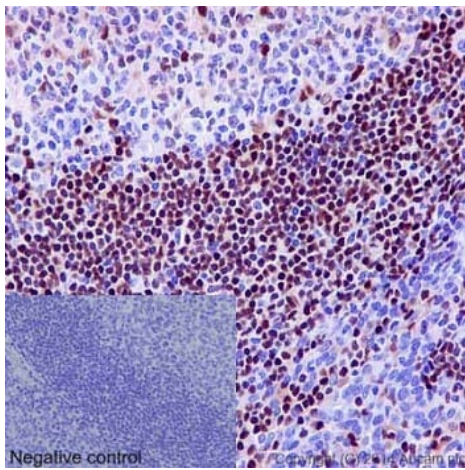
Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), HRP-conjugated at 1/1000 dilution

Predicted band size: 78 kDa

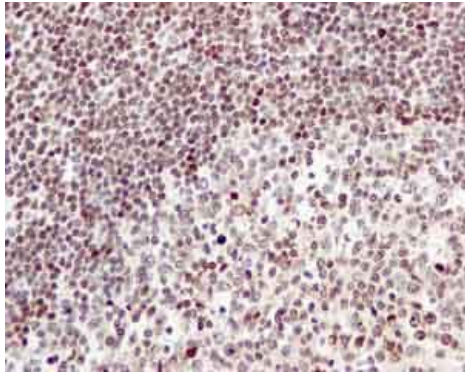
Blocking buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm /TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-5 Lipoxygenase/5-LO antibody [EP6072(2)] (ab169755)

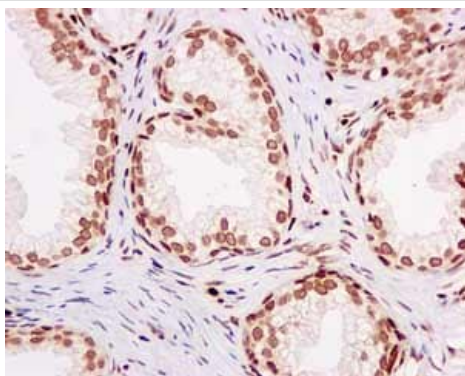
ab169755 staining 5 Lipoxygenase/5-LO in Human tonsil tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed and paraffin-embedded, antigen retrieval was by heat mediation in Tris/EDTA buffer pH9. Samples were incubated with primary antibody (1/100). An undiluted HRP-conjugated mouse anti-rabbit IgG was used as the secondary antibody. Tissue counterstained with Hematoxylin. PBS was used in the negative control rather than the Primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-5 Lipoxygenase/5-LO antibody [EP6072(2)] (ab169755)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling 5 Lipoxygenase/5-LO with ab169755, unpurified, at 1/100 dilution.

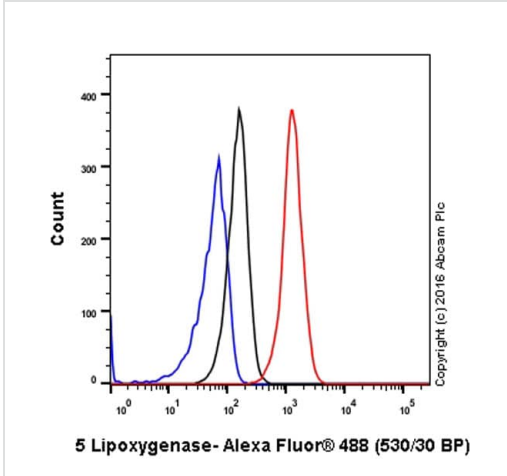
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-5 Lipoxygenase/5-LO antibody [EP6072(2)] (ab169755)

Immunohistochemical analysis of paraffin-embedded Human prostate tissue labeling 5 Lipoxygenase/5-LO with ab169755, unpurified, at 1/100 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

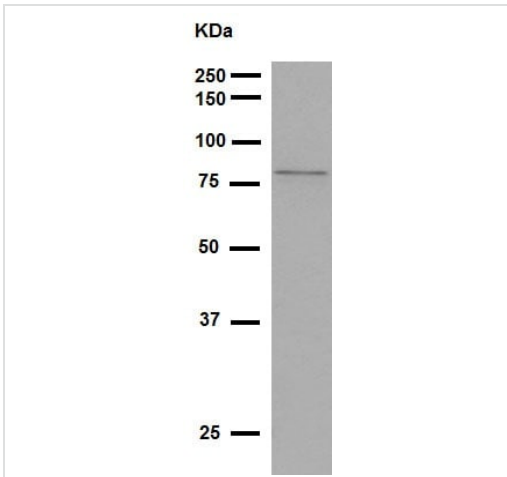


Flow Cytometry (Intracellular) - Anti-5 Lipoxigenase/5-LO antibody [EP6072(2)] (ab169755)

ab169755 staining 5 Lipoxigenase/5-LO in HUVEC (human umbilical vein/vascular endothelium) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde, permabilised with 90% methanol and the sample was incubated with the primary antibody at a dilution of 1/130. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody.

Isotype control: Rabbit monoclonal IgG (black).

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (blue).



Western blot - Anti-5 Lipoxigenase/5-LO antibody [EP6072(2)] (ab169755)

Anti-5 Lipoxigenase/5-LO antibody [EP6072(2)] (ab169755) at 1/1000 dilution + K562 cell Lysate at 10 µg

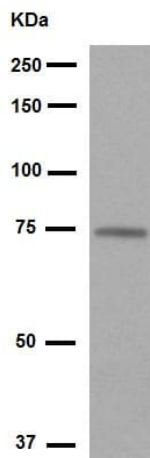
Secondary

Goat Anti-Rabbit IgG, (H+L), HRP-conjugated at 1/1000 dilution

Predicted band size: 78 kDa

Blocking buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm /TBST.



Western blot - Anti-5 Lipoxygenase/5-LO antibody [EP6072(2)] (ab169755)

Human fetal thymus at 10 μ g

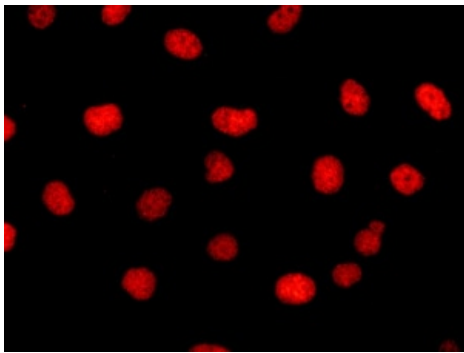
Secondary

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 78 kDa

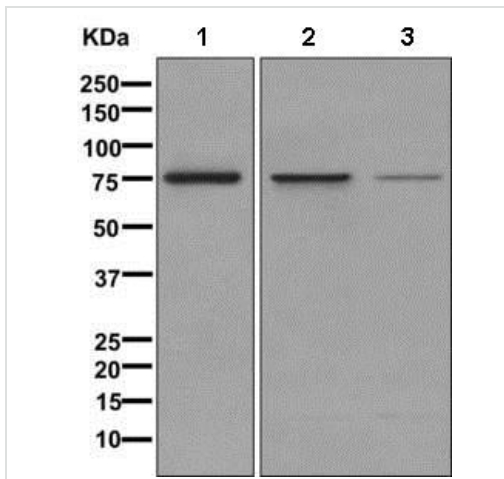
Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Immunocytochemistry/ Immunofluorescence - Anti-5 Lipoxygenase/5-LO antibody [EP6072(2)] (ab169755)

Immunofluorescent analysis of HUVEC cells labeling 5 Lipoxygenase/5-LO with ab169755, unpurified, at 1/100 dilution.



All lanes : Anti-5 Lipoxygenase/5-LO antibody [EP6072(2)]
(ab169755) at 1/1000 dilution (unpurified)

Lane 1 : Fetal thymus lysate

Lane 2 : K562 lysate


Lane 3 : HUVEC lysate

Lysates/proteins at 10 µg per lane.


Predicted band size: 78 kDa

Western blot - Anti-5 Lipoxygenase/5-LO antibody
[EP6072(2)] (ab169755)


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-5 Lipoxygenase/5-LO antibody [EP6072(2)]
(ab169755)

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