


Product datasheet

Anti-5 Lipoxygenase/5-LO antibody [EP6072(2)] - BSA and Azide free ab227991

Recombinant RabMAb

[1 References](#) [6 Images](#)

Overview

Product name	Anti-5 Lipoxygenase/5-LO antibody [EP6072(2)] - BSA and Azide free
Description	Rabbit monoclonal [EP6072(2)] to 5 Lipoxygenase/5-LO - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), ICC/IF, IHC-P, WB
Species reactivity	Reacts with: Rat, Human Predicted to work with: Dog  Does not react with: Mouse
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Fetal thymus, K562 and HUVEC lysates. Human prostate and Human tonsil tissue. HUVEC cells.
General notes	<p>ab227991 is the carrier-free version of ab169755.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS

Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP6072(2)
Isotype	IgG

Applications

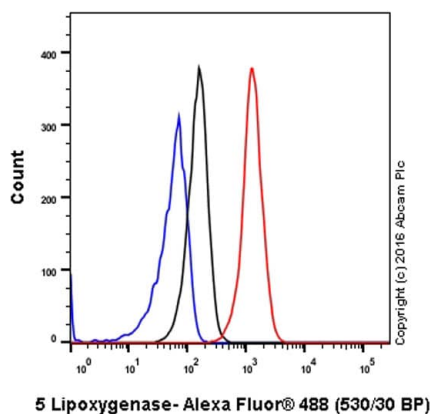
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab227991 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal IgG (Low endotoxin, Azide free), is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> .
WB		Use at an assay dependent concentration. Predicted molecular weight: 78 kDa.

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



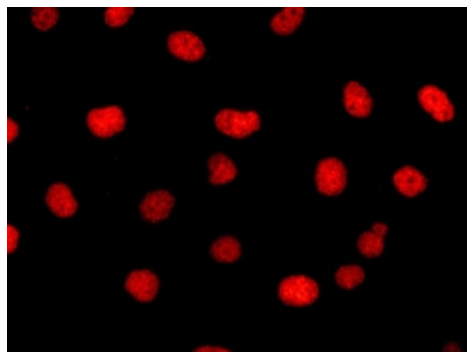
Flow Cytometry (Intracellular) - Anti-5 Lipoxigenase/5-LO antibody [EP6072(2)] - BSA and Azide free (ab227991)

ab169755 staining 5 Lipoxigenase/5-LO in HUVEC (human umbilical vein/vascular endothelium) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde, permeabilised 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.

Isootype control: Rabbit monoclonal IgG (black).

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

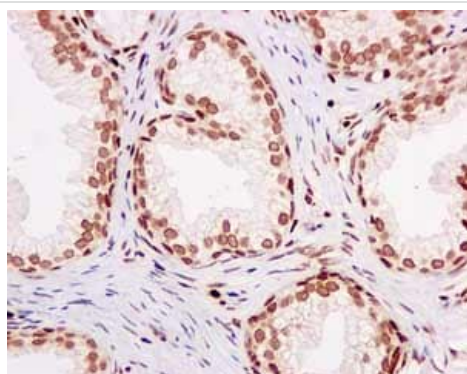
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab169755**).



Immunocytochemistry/ Immunofluorescence - Anti-5 Lipoxigenase/5-LO antibody [EP6072(2)] - BSA and Azide free (ab227991)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab169755**).

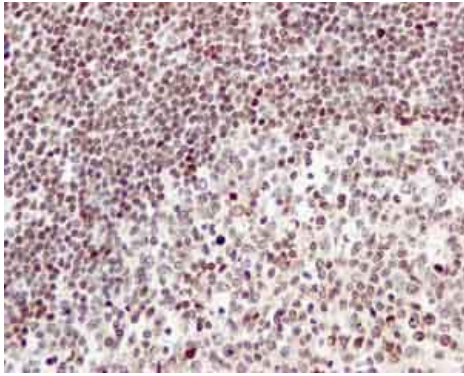


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-5 Lipoxigenase/5-LO antibody [EP6072(2)] - BSA and Azide free (ab227991)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab169755**).

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

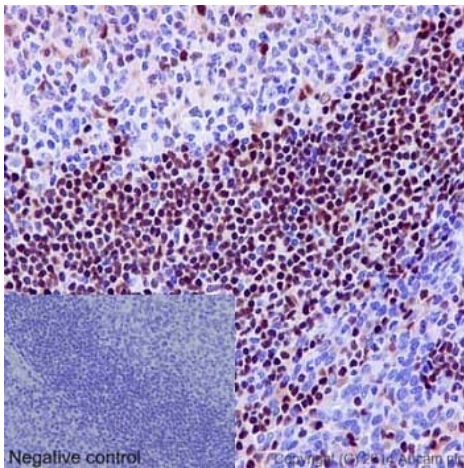


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-5 Lipoygenase/5-LO antibody [EP6072(2)] - BSA and Azide free (ab227991)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab169755**).

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 Lipoygenase/5-LO antibody [EP6072(2)] - BSA and Azide free (ab227991)

This IHC data was generated using the same anti-5 Lipoygenase/5-LO antibody clone, EP6072(2), in a different buffer formulation (**ab169755**).

ab169755 staining 5 Lipoygenase/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.

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

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