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ALOX12B Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10099b

Specification

ALOX12B Antibody (C-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	O75342
Other Accession	Q2KMM4, O70582, NP_001130.1
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**80356**
Antigen Region	**622-652**

ALOX12B Antibody (C-term) - Additional Information

Gene ID 242

Other Names
Arachidonate 12-lipoxygenase, 12R-type, 12R-LOX, 12R-lipoxygenase, 11311-, Epidermis-type lipoxygenase 12, ALOX12B

Target/Specificity
This ALOX12B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 622-652 amino acids from the C-terminal region of human ALOX12B.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ALOX12B Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ALOX12B Antibody (C-term) - Protein Information

Name ALOX12B (HGNC:430)

Function Catalyzes the regio and stereo-specific incorporation of a single molecule of dioxygen into free and esterified polyunsaturated fatty acids generating lipid hydroperoxides that can be further reduced to the corresponding hydroxy species (PubMed:9837935, PubMed:9618483, PubMed:21558561). In the skin, acts upstream of ALOXE3 on the lineolate moiety of esterified omega-hydroxyacyl-sphingosine (EOS) ceramides to produce an epoxy-ketone derivative, a crucial step in the conjugation of omega-hydroxyceramide to membrane proteins (PubMed:21558561). Therefore plays a crucial role in the synthesis of corneocytes lipid envelope and the establishment of the skin barrier to water loss (PubMed:21558561). May also play a role in the regulation of the expression of airway mucins (PubMed:22441738).

Cellular Location
Cytoplasm {ECO:0000255|PROSITE-ProRule:PRU00726}. Cytoplasm, perinuclear region

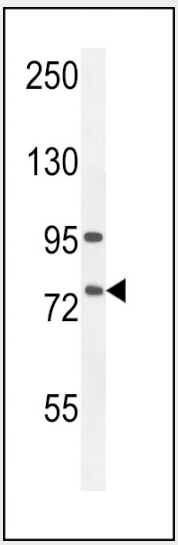
Tissue Location
Expressed in B-cells, hair follicles, foreskin keratinocytes and adult skin. Also expressed in psoriatic tissue

ALOX12B Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

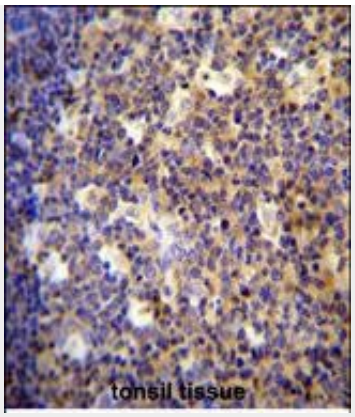
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ALOX12B Antibody (C-term) - Images

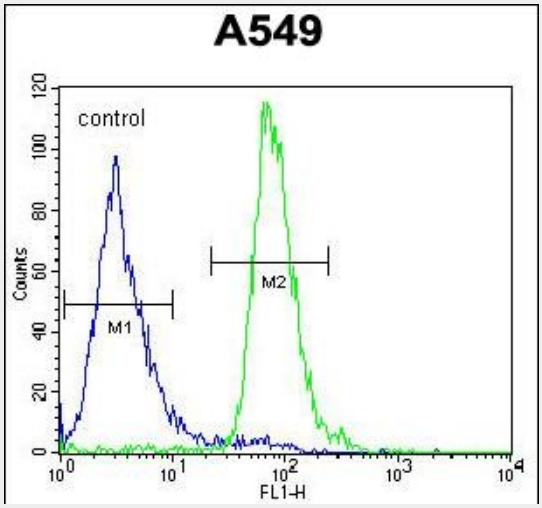


ALOX12B Antibody (C-term) (Cat. #AP10099b) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the ALOX12B antibody detected the ALOX12B protein (arrow).

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ALOX12B antibody (C-term) (Cat. #AP10099b)immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsil tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of ALOX12B antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



ALOX12B Antibody (C-term) (Cat. #AP10099b) flow cytometric analysis of A549 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ALOX12B Antibody (C-term) - Background

This gene encodes an enzyme involved in the converstion of arachidonic acid to 12R-hydroxyeicosatetraenoic acid. Mutations in this gene are associated with nonbullous congenital ichthyosiform erythroderma.

ALOX12B Antibody (C-term) - References

Han, S., et al. Hum. Immunol. 71(7):727-730(2010)
Rajaraman, P., et al. Cancer Epidemiol. Biomarkers Prev. 19(5):1356-1361(2010)
Vahlquist, A., et al. J. Invest. Dermatol. 130(2):438-443(2010)
Agarwal, S., et al. Exp. Dermatol. 18(11):939-946(2009)
Rajaraman, P., et al. Cancer Epidemiol. Biomarkers Prev. 18(5):1651-1658(2009)

ALOX12B Antibody (C-term) - Citations

- Transcriptomic and lipidomic profiling of eicosanoid / docosanoid signalling in affected and non-affected skin of human atopic dermatitis patients.

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