

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	O2KMM4 , 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:[21558561](#), PubMed:[9618483](#), PubMed:[9837935](#)). 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

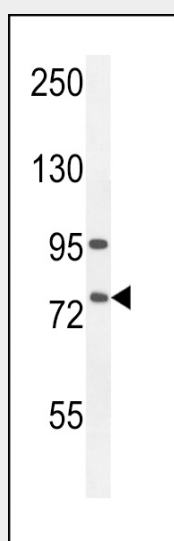
Expressed in B-cells, hair follicles, foreskin keratinocytes and adult skin. Also expressed in psoriatic tissue

ALOX12B Antibody (C-term) - Protocols

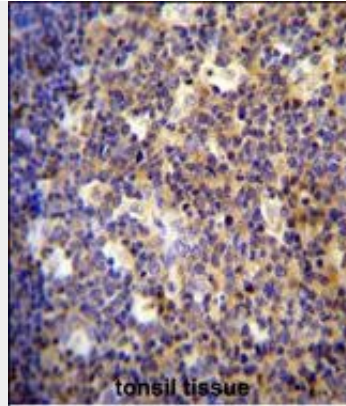
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

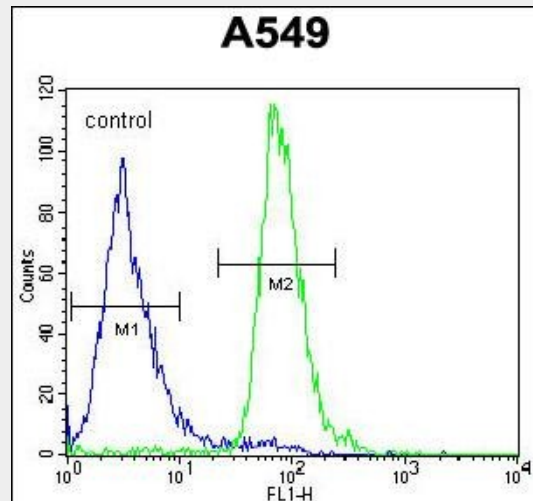
ALOX12B Antibody (C-term) - Images



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).



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 conversion 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.](#)

