

ALOX12B Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP10099b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	O75342
Other Accession	Q2KMM4 , O70582 , NP_001130.1
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17152
Calculated MW	80356
Antigen Region	622-652

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~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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.

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

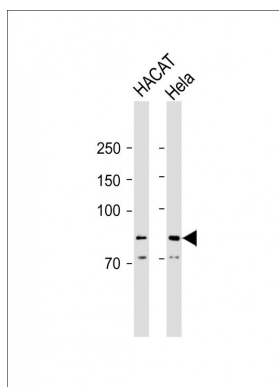
Background

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.

References

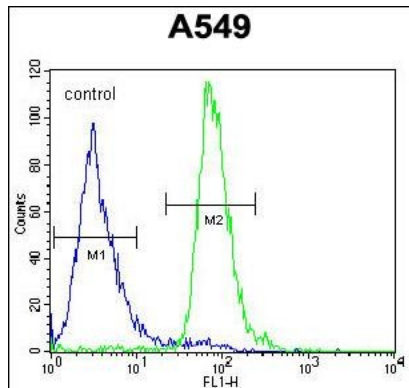
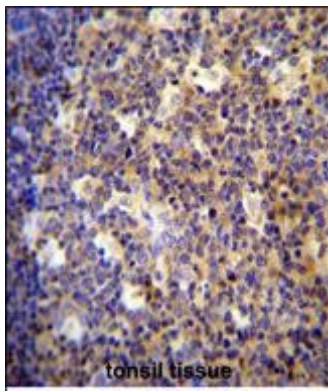
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 Rajaraman, P., et al. Cancer Epidemiol. Biomarkers Prev. 19(5):1356-1361(2010)
 Vahlquist, A., et al. J. Invest. Dermatol. 130(2):438-443(2010)
 Agarwal, S., et al. Exp. Dermatol. 18(11):939-946(2009)
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Images



All lanes: Anti-ALOX12B Antibody (C-term) at 1:2000 dilution Lane 1: HACAT whole cell lysate Lane 2: HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 80KDa Blocking/Dilution buffer: 5% NFDM/TBST.

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.

Citations

- [Transcriptomic and lipidomic profiling of eicosanoid / docosanoid signalling in affected and non-affected skin of human atopic dermatitis patients.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.