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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, Bovine, Canine, Rabbit
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

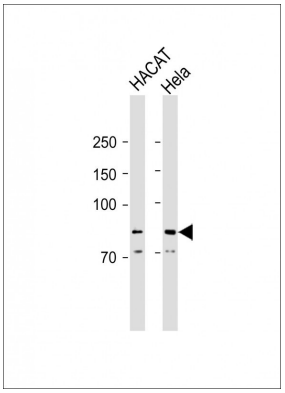
Background

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

References

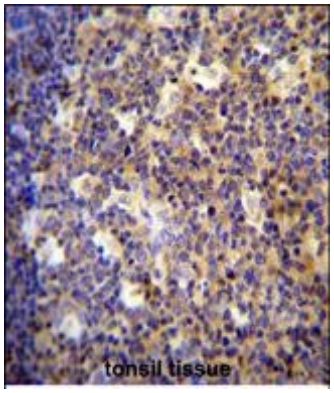
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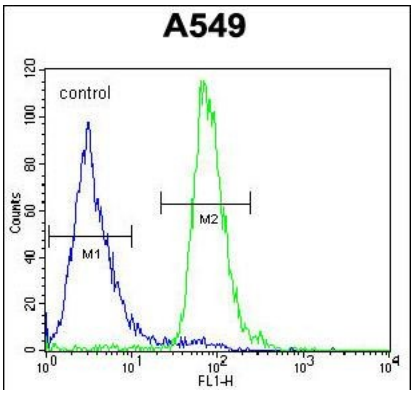
Images



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'.