

Rabbit Anti-ALOX12 antibody

SL3874R

Product Name:	ALOX12
Chinese Name:	12脂氧合酶抗体
Alias:	12 Lox; 12(S) lipoxygenase; 12S LOX; Alox 12; Alox12L; Alox15; Arachidonate 12 lipoxygenase 12S type; Arachidonate 12 lipoxygenase; Arachidonate 12 lipoxygenase leukocyte type; Arachidonate 12 lipoxygenase, 12S type; Arachidonate 12 lipoxygenase, leukocyte type; EC1,13.11.31; LOG 12; LOG12; Platelet type 12 lipoxygenase; Platelet type lipoxygenase 12; P-12-LOX; LOX12_HUMAN; 12 Lipoxygenase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	76kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human 12 Lipoxygenase:101-200/663
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a member of the lipoxygenase family of proteins. The encoded enzyme acts on different polyunsaturated fatty acid substrates to generate bioactive lipid mediators including eicosanoids and lipoxins. The encoded enzyme and its reaction

products have been shown to regulate platelet function. Elevated expression of this gene has been observed in pancreatic islets derived from human diabetes patients. Allelic variants in this gene may be associated with susceptibility to toxoplasmosis. Multiple pseudogenes of this gene have been identified in the human genome. [provided by RefSeq, Aug 2017]

Function:

Non-heme iron-containing dioxygenase that catalyzes the stereo-specific peroxidation of free and esterified polyunsaturated fatty acids generating a spectrum of bioactive lipid mediators. Mainly converts arachidonic acid to (12S)-hydroperoxyeicosatetraenoic acid/(12S)-HPETE but can also metabolize linoleic acid. Has a dual activity since it also converts leukotriene A4/LTA4 into both the bioactive lipoxin A4/LXA4 and lipoxin B4/LXB4. Through the production of specific bioactive lipids like (12S)-HPETE it regulates different biological processes including platelet activation. It also probably positively regulates angiogenesis through regulation of the expression of the vascular endothelial growth factor. Plays a role in apoptotic process, promoting the survival of vascular smooth muscle cells for instance. May also play a role in the control of cell migration and proliferation. {ECO:0000269|PubMed:16638750,

Subcellular Location:

Cytoplasm, cytosol. Membrane. Note=Membrane association is stimulated by EGF.

Tissue Specificity:

Expressed in vascular smooth muscle cells.

DISEASE:

Esophageal cancer (ESCR) [MIM:133239]: A malignancy of the esophagus. The most common types are esophageal squamous cell carcinoma and adenocarcinoma. Cancer of the esophagus remains a devastating disease because it is usually not detected until it has progressed to an advanced incurable stage. {ECO:0000269|PubMed:17460548}. Note=Disease susceptibility may be associated with variations affecting the gene represented in this entry. Gln at position 261 may confer interindividual susceptibility to esophageal cancer (PubMed:17460548). {ECO:0000269|PubMed:17460548}. Colorectal cancer (CRC) [MIM:114500]: A complex disease characterized by malignant lesions arising from the inner wall of the large intestine (the colon) and the rectum. Genetic alterations are often associated with progression from premalignant lesion (adenoma) to invasive adenocarcinoma. Risk factors for cancer of the colon and rectum include colon polyps, long-standing ulcerative colitis, and genetic family history. {ECO:0000269|PubMed:17151091}. Note=Disease susceptibility may be associated with variations affecting the gene represented in this entry. Gln at position 261 may confer interindividual susceptibility to colorectal cancer (PubMed:17460548). {ECO:0000269|PubMed:17460548}.

Similarity:

Belongs to the lipoxygenase family.

SWISS:
P18054
Cono ID:
239
Database links:
Entrez Gene: 239Human
<u>Omim: 152391</u> Human
SwissProt: P18054Human
Unigene: 65//31Human
Important Note:
This product as supplied is intended for research use only, not for use in human,
therapeutic or diagnostic applications.

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