



Anti-ALOX5 monoclonal antibody (DCABH-10500)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	This gene encodes a member of the lipoxygenase gene family and plays a dual role in the synthesis of leukotrienes from arachidonic acid. The encoded protein, which is expressed specifically in bone marrow-derived cells, catalyzes the conversion of arachidonic acid to 5(S)-hydroperoxy-6-trans-8,11,14-cis-eicosatetraenoic acid, and further to the allylic epoxide 5(S)-trans-7,9-trans-11,14-cis-eicosatetraenoic acid (leukotriene A4). Leukotrienes are important mediators of a number of inflammatory and allergic conditions. Mutations in the promoter region of this gene lead to a diminished response to antileukotriene drugs used in the treatment of asthma and may also be associated with atherosclerosis and several cancers. Alternatively spliced transcript variants have been observed, but their full-length nature has not been determined.
Immunogen	A synthetic peptide of human ALOX5 is used for rabbit immunization.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Protein A
Conjugate	Unconjugated
Applications	Western Blot (Transfected lysate); ELISA
Buffer	In 1x PBS, pH 7.4
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	ALOX5 arachidonate 5-lipoxygenase [Homo sapiens]
Official Symbol	ALOX5
Synonyms	ALOX5; arachidonate 5-lipoxygenase; 5 LOX; leukotriene A4 synthase; arachidonic acid 5-lipoxygenase; arachidonic 5-lipoxygenase alpha-10 isoform; arachidonic 5-lipoxygenase delta-13 isoform; arachidonic 5-lipoxygenase delta-p10 isoform; arachidonic 5-lipoxygenase delta-10-13 isoform; 5-LO; 5LPG; LOG5; 5-LOX; MGC163204;
Entrez Gene ID	240
Protein Refseq	NP_000689
UniProt ID	P09917
Chromosome Location	10q11.2
Pathway	Arachidonic acid metabolism, organism-specific biosystem; Arachidonic acid metabolism, conserved biosystem; Eicosanoid Synthesis, organism-specific biosystem; IL-5 Signaling Pathway, organism-specific biosystem; Leukotriene synthesis, organism-specific biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem;
Function	arachidonate 5-lipoxygenase activity; arachidonate 5-lipoxygenase activity; iron ion binding; lipoxygenase activity; metal ion binding; oxidoreductase activity; protein binding;