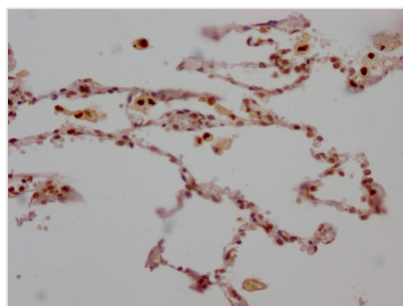




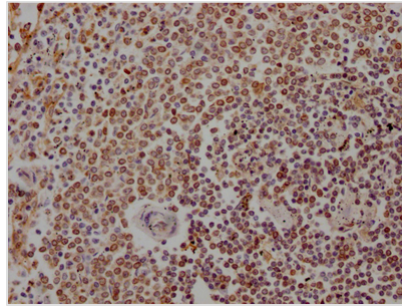
ALOX5 Recombinant Monoclonal Antibody

Product Code	CSB-RA198316A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P09917
Immunogen	A synthesized peptide derived from human 5 Lipoxygenase
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	Catalyzes the first step in leukotriene biosynthesis, and thereby plays a role in inflammatory processes.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cardiovascular; Metabolism; Signal transduction
Gene Names	ALOX5
Clone No.	1D4

Image



IHC image of CSB-RA198316A0HU diluted at 1:100 and staining in paraffin-embedded human lung tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA198316A0HU diluted at 1:100 and staining in paraffin-embedded human spleen tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The ALOX5 recombinant antibody production process comprises four stages: sequencing the ALOX5 monoclonal antibody gene, cloning the gene into a plasmid vector, transfecting the recombinant vector into a host cell line, and purifying the ALOX5 recombinant monoclonal antibody from the cell culture supernatant by affinity chromatography. The ALOX5 monoclonal antibody originates from the ALOX5 antibody-producing hybridomas. During the manufacturing of the ALOX5 monoclonal antibody, a synthesized peptide obtained from human ALOX5 is utilized as the immunogen. The ALOX5 recombinant monoclonal antibody has been recommended for ELISA and IHC applications to detect human ALOX5 protein.

ALOX5 is an enzyme that catalyzes the first two steps in the biosynthesis of leukotrienes from arachidonic acid. ALOX5 plays a crucial role in the inflammatory response by producing leukotrienes, which promote vascular permeability, chemotaxis, and recruitment of leukocytes to the site of inflammation. It is also involved in the regulation of platelet aggregation and smooth muscle cell proliferation. Dysregulation of ALOX5 activity has been implicated in several diseases, including asthma, atherosclerosis, and cancer.