



5-LO (phospho Ser523) rabbit pAb

Cat No.:ES5390

For research use only

Overview

Product Name	5-LO (phospho Ser523) rabbit pAb
Host species	Rabbit
Applications	WB;ELISA
Species Cross-Reactivity	Human;Rat
Recommended dilutions	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human 5-LO (phospho Ser523)
Specificity	Phospho-5-LO (S523) Polyclonal Antibody detects endogenous levels of 5-LO protein only when phosphorylated at S523.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C . Avoid repeated freeze-thaw cycles.
Protein Name	Arachidonate 5-lipoxygenase
Gene Name	ALOX5
Cellular localization	Cytoplasm . Nucleus matrix . Nucleus membrane ; Peripheral membrane protein . Cytoplasm, perinuclear region . Cytoplasm, cytosol . Nucleus envelope . Nucleus intermembrane space . Shuttles between cytoplasm and nucleus (PubMed:19233132). Found exclusively in the nucleus, when phosphorylated on Ser-272 (PubMed:18978352). Calcium binding promotes translocation from the cytosol and the nuclear matrix to the nuclear envelope and membrane association (PubMed:19233132, PubMed:3118366, PubMed:8245774, PubMed:16275640). .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal





Concentration	1 mg/ml
Observed band	77kD
Human Gene ID	240
Human Swiss-Prot Number	P09917
Alternative Names	ALOX5; LOG5; Arachidonate 5-lipoxygenase; 5-LO; 5-lipoxygenase
Background	<p>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 encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2012],</p>

