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Product datasheet for TA309073

5 Lipoxygenase (ALOX5) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:1000
Reactivity:	Human, Rat
Modifications:	Phospho-specific
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser523 conjugated to KLH
Formulation:	100 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	80 kDa
Gene Name:	arachidonate 5-lipoxygenase
Database Link:	NP_000689 Entrez Gene 25290 RatEntrez Gene 240 Human P09917

View online »

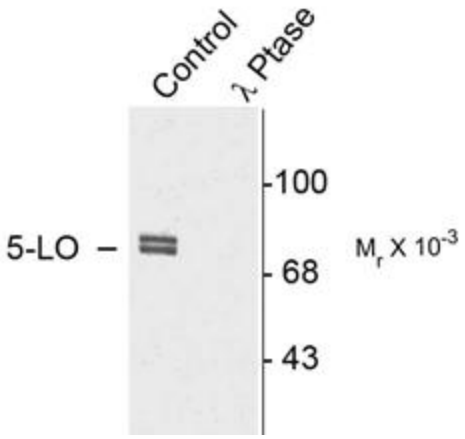
Background: This gene encodes a member of the lipoxygenase gene family and plays a dual role in the synthesis of leukotrienes from arachidonic acid. The encoded protein, which is expressed specifically in bone marrow-derived cells, catalyzes the conversion of arachidonic acid to 5(S)-hydroperoxy-6-trans-8,11,14-cis-eicosatetraenoic acid, and further to the allylic epoxide 5(S)-trans-7,9-trans-11,14-cis-eicosatetrenoic 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. [provided by RefSeq]

Synonyms: 5-LO; 5-LOX; 5LPG; LOG5

Protein Families: Druggable Genome

Protein Pathways: Arachidonic acid metabolism, Metabolic pathways

Product images:



Western blot of rat cortex lysate showing specific immunolabeling of the ~80k doublet of 5-LO phosphorylated at Ser523 (Control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: Î»-Ptase). The blot is identical to the control except that it was incubated in Î»-Ptase (1200 units for 30 min) before being exposed to the 5-LO Ser523 antibody. The immunolabeling is completely eliminated by treatment with Î»-Ptase.