

Rabbit 5 Lipoxygenase Polyclonal Antibody | anti-ALOX5 antibody

Phospho-5 Lipoxygenase (Ser272) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329441	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (89%), Bovine (89%), Sheep (89%), Rabbit (89%), Dog (89%)	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

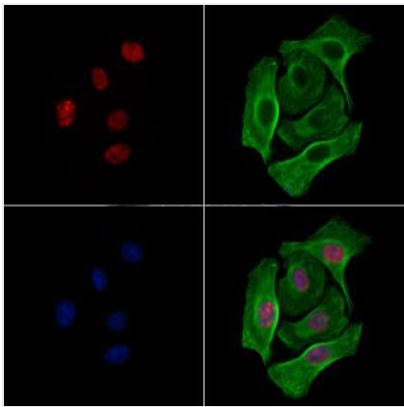
PRODUCT SYNONYMS

5 Lipoxygenase; Polyclonal Antibody; Phospho-5 Lipoxygenase (Ser272) Antibody; 5 LO; 5 LOX; 5-lipoxygenase; 5-LO; 5-LOX; 5LOX; 5LPG; ALOX 5; Alox5; Arachidonate 5 lipoxygenase; Arachidonate 5-lipoxygenase; arachidonic 5-lipoxygenase alpha-10 isoform; arachidonic 5-lipoxygenase delta-10-13 isoform; arachidonic 5-lipoxygenase delta-13 isoform; arachidonic 5-lipoxygenase delta-p10 isoform; Arachidonic acid 5 lipoxygenase; Leukotriene A4 synthase; LOG 5; LOG5; LOX5_HUMAN; MGC163204; anti-ALOX5 antibody

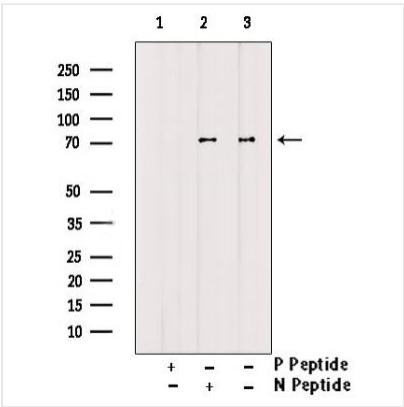
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (89%), Bovine (89%), Sheep (89%), Rabbit (89%), Dog (89%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-5 Lipoxygenase (Ser272) Antibody detects endogenous levels of 5 Lipoxygenase only when phosphorylated at Ser272.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-ALOX5 antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human 5 Lipoxygenase around the phosphorylation site of Ser272.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Serine phosphorylation by MAPKAPK2 is stimulated by arachidonic acid. Phosphorylation on Ser-523 by PKA has an inhibitory effect. Phosphorylation on Ser-272 prevents export from the nucleus.
Subunit Structure	Interacts with ALOX5AP and LTC4S. Interacts with COTL1, the interaction is required for stability and efficient catalytic activity.
Similarity	Belongs to the lipoxygenase family.
Subcellular Location	Cytoplasm. Nucleus matrix. Nucleus membrane>Peripheral membrane protein. Note: Shuttles between cytoplasm and nucleus. Found exclusively in the nucleus, when phosphorylated on Ser-272. Calcium binding promotes translocation from the cytosol and the nuclear matrix to the nuclear envelope and membrane association.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)
Staining HeLa cells(4h of LPS treatment) by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25 degree C. Samples were then incubated with primary Ab(AF4399 1:200) and mouse anti-beta tubulin Ab(T0023 1:200) for 1 hour at 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI(blue).



WB (Western Blot)
Western blot analysis of extracts from HuvEc, using Phospho-5-Lipoxygenase (Ser272) Antibody. Lane1 was treated with phospho-blocking peptide, Lane2 was treated with non-phospho-blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-ALOX5 antibody	Catalyzes the first step in leukotriene biosynthesis, and thereby plays a role in inflammatory processes.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4502057
NCBI GeneID	240
NCBI Accession #	NP_000689.1
NCBI GenBank Nucleotide #	NM_000698.3
UniProt Accession #	P09917; Q5JQ14
Molecular Weight	77,983 Da
NCBI Official Full Name	arachidonate 5-lipoxygenase isoform 1
NCBI Official Synonym Full Names	arachidonate 5-lipoxygenase
NCBI Official Symbol	ALOX5
NCBI Official Synonym Symbols	5-LO; 5LPG; LOG5; 5-LOX
NCBI Protein Information	arachidonate 5-lipoxygenase; LOX-5; 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-lipoxygenas
UniProt Protein Name	Arachidonate 5-lipoxygenase
UniProt Gene Name	ALOX5
UniProt Synonym Gene Names	LOG5; 5-LO
UniProt Entry Name	LOX5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

