

phospho-ALOX5 (Ser271) Rabbit pAb

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Catalog # AP94529

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P12527
Reactivity	Human, Rat
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	78 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthesised phosphopeptide derived from rat 5-Lipoxygenase around the phosphorylation site of Ser271
Epitope Specificity	QL(p-S)LE
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Nucleus matrix. Nucleus membrane; Peripheral membrane protein.
SIMILARITY	Belongs to the lipoxygenase family. Contains 1 lipoxygenase domain. Contains 1 PLAT domain.
SUBUNIT	Interacts with ALOX5AP and LTC4S.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Other Names	Polyunsaturated fatty acid 5-lipoxygenase, 1.13.11.-, Alox5 {ECO:0000312 RGD:2096}
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Dilution

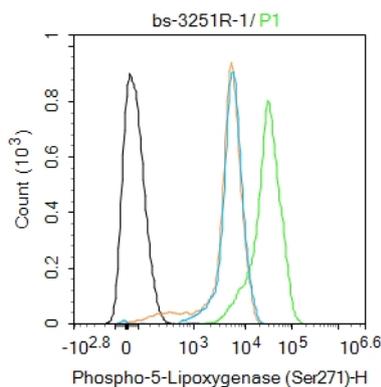
IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1ug/Test

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information**Background**

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Images

Blank control(black line):A431.

Primary Antibody (green line): Rabbit

Anti-Phospho-5-Lipoxygenase (Ser271) antibody (AP94529)

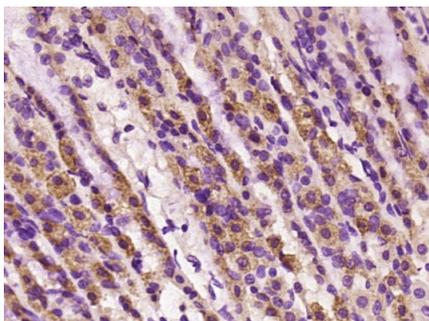
Dilution:1ug/Test;

Secondary Antibody(white blue line): Goat anti-rabbit IgG-AF488

Dilution: 0.5ug/Test.

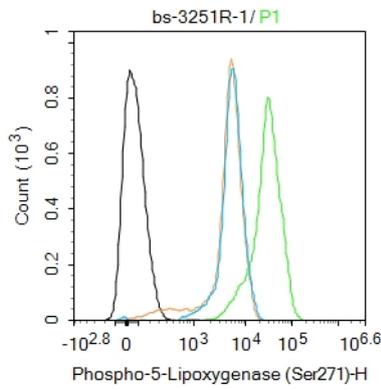
Isotype control(orange line): Normal Rabbit IgG Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Paraformaldehyde-fixed, paraffin embedded (Rat stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-5-Lipoxygenase(Ser271)) Polyclonal Antibody, Unconjugated (AP94529) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Blank control(black line):A431. Primary Antibody (green line): Rabbit Anti-Phospho-5-Lipoxygenase (Ser271)



antibody (AP94529) Dilution:1ug/Test; Secondary Antibody(white blue line): Goat anti-rabbit IgG-AF488 Dilution: 0.5ug/Test. Isotype control(orange line): Normal Rabbit IgG Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.