



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

SL3251R

Product Name:	Phospho-5-Lipoxygenase (Ser271)
Chinese Name:	磷酸化5-脂氧合酶抗体
Alias:	5-Lipoxygenase(Phospho Ser271); 5-Lipoxygenase(Phospho S271); p-5-Lipoxygenase(Ser271); 5-lipoxygenase; 5 LO; 5LPG; ALOX 5; ALOX5; Arachidonate 5 lipoxygenase; Arachidonic acid 5 lipoxygenase; Leukotriene A4 synthase; LOG 5; LOG5; MGC163204; LOX5 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	78kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from rat 5-Lipoxygenase around the phosphorylation site of Ser271:QL(p-S)LE
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed

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]

Function:

Catalyzes the first step in leukotriene biosynthesis, and thereby plays a role in inflammatory processes.

Subunit:

Interacts with ALOX5AP and LTC4S.

Subcellular Location:

Cytoplasm. Nucleus matrix. Nucleus membrane; Peripheral membrane protein.

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.

Similarity:

Belongs to the lipoxygenase family.

Contains 1 lipoxygenase domain.

Contains 1 PLAT domain.

SWISS:

P09917

Gene ID:

240

Database links:

[Entrez Gene: 477753](#)Dog

[Entrez Gene: 240](#)Human

[Entrez Gene: 11689](#)Mouse

[Entrez Gene: 25290](#)Rat

Product Detail:

[Omid: 152390](#)Human

[SwissProt: P09917](#)Human

[SwissProt: P48999](#)Mouse

[SwissProt: P12527](#)Rat

[Unigene: 89499](#)Human

[Unigene: 41072](#)Mouse

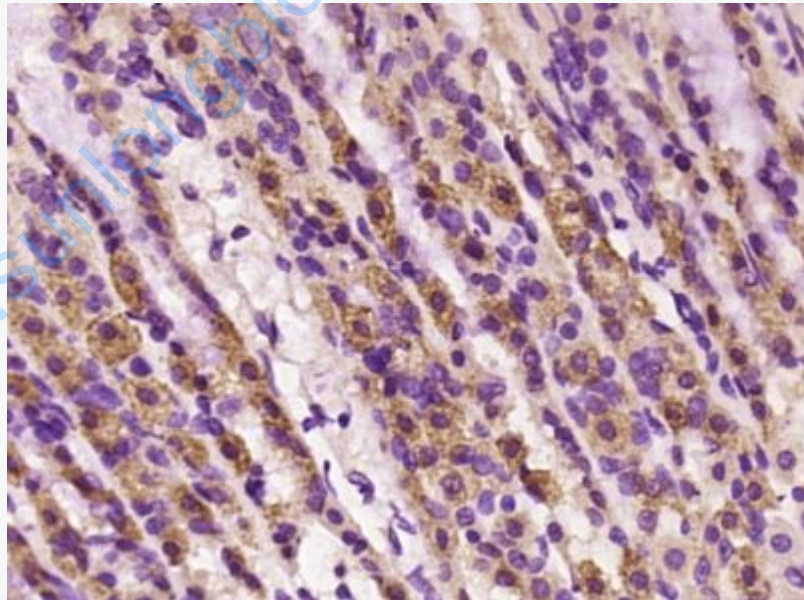
[Unigene: 9662](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

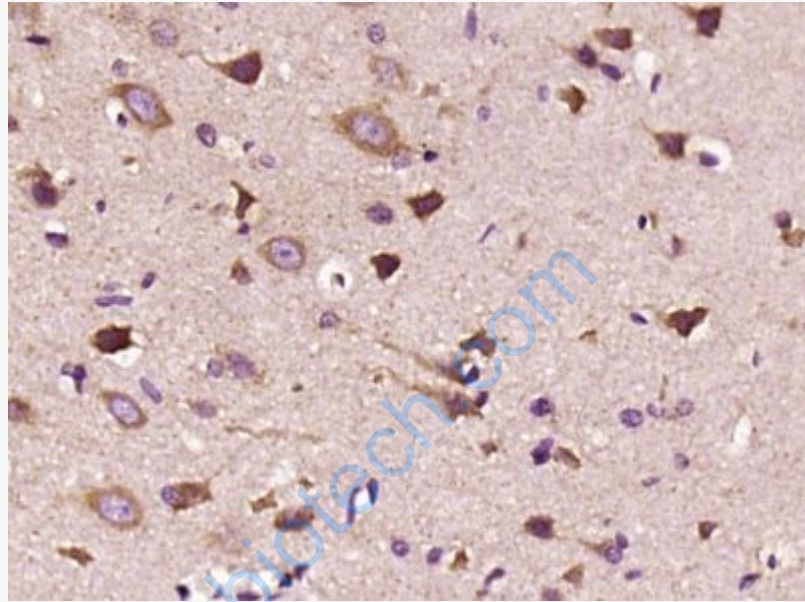
5-脂氧合酶蛋白(5-LOX; 5-lipoxygenase; Arachidonate 5-lipoxygenase; 5-LO; ALOX5)是花生四烯酸代谢途径中的一种关键酶,在恶性Tumour的发生、发展过程中起了重要作用.抑制5-脂氧合酶及其产物的表达有可能预防和逆转恶性Tumour的发生。

Picture:



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 (SL3251R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); 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 (SL3251R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.