

5-LO (Phospho Ser523) Rabbit pAb

CatalogNo: YP0491

Key Features

Host Species

- Rabbit

Reactivity

- Human,Rat

Applications

- WB,ELISA

MW

- 77kD (Observed)

Isotype

- IgG

Recommended Dilution Ratios

WB 1:500-1:2000**ELISA 1:10000****Not yet tested in other applications.**

Storage

Storage*

-15°C to -25°C/1 year(Do not lower than -25°C)

Formulation

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality

Polyclonal

Immunogen Information

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. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):KSSGF

| Target Information

Gene name ALOX5

Protein Name Arachidonate 5-lipoxygenase

Organism	Gene ID	UniProt ID
Human	240;	P09917;
Mouse		P48999;
Rat	25290;	P12527;

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). .

Tissue specificity Brain,Spleen,

Function Catalytic activity:Arachidonate + O(2) = leukotriene A(4) + H(2)O.,cofactor:Binds 1 iron ion per subunit.,cofactor:Binds 2 calcium ions per subunit.,Function:Catalyzes the first step in leukotriene biosynthesis, and thereby plays a role in inflammatory processes.,pathway:Lipid metabolism; leukotriene A4 biosynthesis.,PTM: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.,similarity:Contains 1 lipoxygenase domain.,similarity:Contains 1 PLAT domain.,subcellular location: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.,subunit:Interacts with ALOX5AP and LTC4S.,

| Validation Data

| Contact information

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Please scan the QR code to access additional product information:
5-LO (Phospho Ser523) Rabbit pAb

