

**AP06493PU-N****Polyclonal Antibody to ALOX5 / LOG5 - Aff - Purified****Alternate names:**

5-LO, 5-lipoxygenase, Arachidonate 5-lipoxygenase

**Quantity:**

0.1 mg

**Concentration:**

1.0 mg/ml

**Background:**

5-lipoxygenase (5-LO) is expressed primarily in polymorphonuclear leukocytes, macrophages, and mast cells. 5-LO performs the first two catalytic reactions in the biosynthesis of leukotrienes, lipid metabolites that induce contractions of airway smooth muscle and increase vascular permeability during anaphylaxis. The cellular localization of 5-LO varies between cell types. In activated blood polymorphonuclear leukocytes 5-LO undergoes calcium dependent translocation from the cytosol to the nuclear envelope. In alveolar macrophages, the majority of 5-LO is localized in the nucleus and, upon activation of these cells, intranuclear 5-LO binds to the nuclear membrane. This intracellular shuttling of 5-LO is dependent on the association with various signaling molecules, phosphorylation and the presence of a distinct nuclear localization signal, which is encoded at the amino terminus of 5-LO.

**Uniprot ID:**[P09917](#)**NCBI:**[NP\\_000689.1](#)**GeneID:**[240](#)**Host:**

Rabbit

**Immunogen:**

Synthetic peptide, corresponding to amino acids 231-280 of Human ALOX5.

**Format:****State:** Liquid purified Ig fraction (> 95% pure by SDS-PAGE).**Purification:** Affinity Chromatography using epitope-specific immunogen.**Buffer System:** Phosphate buffered saline (PBS), pH~7.2**Preservatives:** 0.05% Sodium Azide**Applications:****Western blot:** 1/500-1/1000.**Immunohistochemistry on Paraffin Sections:** 1/50-1/200.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Molecular Weight:**

~78 kDa

**Specificity:**This antibody detects endogenous levels of ALOX5 protein.  
(region surrounding Glu267)**Species Reactivity:****Tested:** Human.**Expected from sequence similarity:** Mouse and Rat.**Storage:**

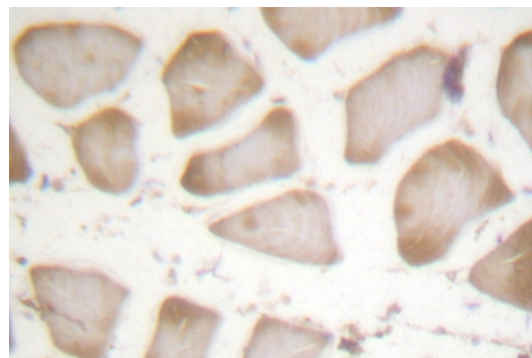
Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

**Pictures:**

**Immunohistochemistry** analyzes of ALOX5 antibody (Cat.-No.: AP06493PU-N) in paraffin-embedded human skeletal muscle tissue.



**Western blot (WB)** analysis of ALOX5 antibody (Cat.-No.: AP06493PU-N) at 1/500 dilution  
Lane1:HEK293T whole cell lysate  
Lane2:Rat lung tissue lysate

