

Product datasheet for **AP05762PU-N**

5 Lipoxygenase (ALOX5) pSer523 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Western Blot: 1/1000. Detects a doublet of approximately 80kDa in Rat cortex lysate. For the detection of phosphoproteins, serine phosphatase inhibitors such as 10mM Sodium Fluoride should be added to the sample buffer. Milk or other casein-based blocking solutions are not recommended as casein is a phosphoprotein and its use can result in high background.
Reactivity:	Human, Monkey, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic phosphopeptide corresponding to an amino acid sequence within Human 5-lipoxygenase which includes phosphorylated Ser523.
Specificity:	This antibody specifically recognizes Human 5-lipoxygenase (5-LO, also known as arachidonate 5-lipoxygenase) when phosphorylated at Ser523.
Formulation:	10mM HEPES pH7.5, 150mM NaCl containing 0.09% Sodium Azide, 0.01% BSA, 50% Glycerol State: Purified State: Liquid purified IgG fraction
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	arachidonate 5-lipoxygenase
Database Link:	Entrez Gene 240 Human P09917



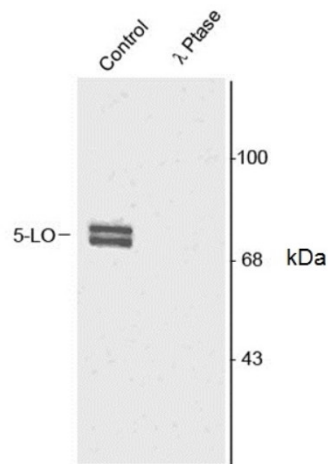
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Background:

5-LO is an enzyme that catalyses the synthesis of leukotrienes (LT's) from arachidonic acid (a polyunsaturated fatty acid), by the insertion of an oxygen into the arachidonic backbone. 5-LO requires calcium, ATP and the 5LOactivating protein as cofactors for full activity. Leukotrienes are synthesised and secreted by leukocytes in response to immunologic or inflammatory stimuli, such as in asthma and allergic reactions. The biological effects of LT's include leukocyte chemotaxis, pulmonary airway constriction, mucous hypersecretion, vasoconstriction and increased vascular permeability. In recent years 5-LO has also been implicated in the regulation of cell proliferation and apoptosis and has been found in a broad variety of cancer cells.

Synonyms:

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

Product images:

Western blot of Rat hippocampal lysate showing phospho-specific immunolabelling of the ~80 kDa doublet of 5-LO phosphorylated at Ser523