



# Magic™ Anti-5-lipoxygenase (Phospho S523) polyclonal antibody (CPBT-65443R5)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

### Product Overview

This product specifically recognises human 5-lipoxygenase (5-LO, also known as arachidonate 5-lipoxygenase) when phosphorylated at Ser523. 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 5-LO-activating 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. Western Blotting detects a doublet of approximately 80kDa in rat cortex lysate.

<b>Specificity</b>	ALOX5
<b>Target</b>	5-lipoxygenase
<b>Immunogen</b>	Synthetic phosphopeptide corresponding to an amino acid sequence within human 5-lipoxygenase which includes phosphorylated Ser523.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Primates, Rat
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB
<b>Format</b>	Purified IgG - liquid

<b>Size</b>	100 µl
<b>Preservative</b>	0.09% Sodium Azide
<b>Storage</b>	in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">ALOX5 arachidonate 5-lipoxygenase [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	ALOX5
<b>Synonyms</b>	ALOX5; arachidonate 5-lipoxygenase; 5-LO; 5LPG; LOG5; 5-LOX; LOX-5; leukotriene A4 synthase; arachidonic acid 5-lipoxygenase; arachidonic 5-lipoxygenase alpha-10 isoform; arachidonic 5-lipoxygenase delta-13 isoform; arachidonic 5-lipoxygenase delta-p10 is
<b>Entrez Gene ID</b>	<a href="#">240</a>
<b>Protein Refseq</b>	<a href="#">NP_000689</a>
<b>UniProt ID</b>	P09917
<b>Chromosome Location</b>	10q11.2
<b>Pathway</b>	Arachidonic acid metabolism; Eicosanoid Synthesis; IL-5 Signaling Pathway; Metabolic pathways; Metabolism; Metabolism of lipids and lipoproteins; Ovarian steroidogenesis; Selenium Pathway;
<b>Function</b>	arachidonate 5-lipoxygenase activity; iron ion binding; protein binding;