

# Anti-5-Lipoxygenase (Ser523) Antibody

Our Anti-5-Lipoxygenase (Ser523) rabbit polyclonal phosphospecific primary antibody from PhosphoSolu  
Catalog # AN1297

## Product Information

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<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">P09917</a>
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Calculated MW</b>	77983

## Additional Information

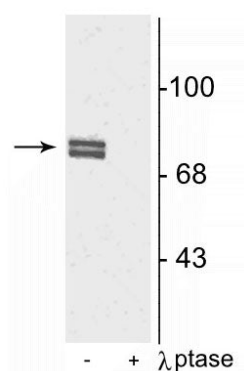
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<b>Gene ID</b>	240
<b>Other Names</b>	5 Lipoxygenase antibody, 5 LO antibody, 5 LOX antibody, 5-lipoxygenase antibody, 5-LO antibody, 5-LOX antibody, 5LOX antibody, 5LPG antibody, ALOX 5 antibody, Alox5 antibody, Arachidonate 5 lipoxygenase antibody, Arachidonate 5-lipoxygenase antibody, arachidonic 5-lipoxygenase alpha-10 isoform antibody, arachidonic 5-lipoxygenase delta-10-13 isoform antibody, arachidonic 5-lipoxygenase delta-13 isoform antibody, arachidonic 5-lipoxygenase delta-p10 isoform antibody, Arachidonic acid 5 lipoxygenase antibody, Leukotriene A4 synthase antibody, LOG 5 antibody, LOG5 antibody, LOX5_HUMAN antibody, MGC163204 antibody
<b>Target/Specificity</b>	The enzyme 5-lipoxygenase (5-LO) plays a key role in regulating the production of leukotrienes (LTs) (Funk, 2001). Overproduction of LTs contributes to several diseases, most notably chronic inflammatory diseases, including asthma (Drazen et al., 1994), fibrosis (Wilborn et al., 1996) and atherosclerosis (Dwyer et al., 2004). Recent work has demonstrated that the activity of 5-LO is regulated by PKA phosphorylation of serine-523 in 5-LO (Luo et al., 2004). Under normal conditions, this phosphorylation may be important in limiting inflammation. Abnormal signaling through cAMP and PKA, then, could contribute to a variety of diseases, including those characterized by chronic inflammation. The phospho-specific antibody to Ser523 on 5-LO is thus likely to provide a valuable tool for studies of the role of 5-LO regulation in diseases such as asthma, fibrosis and atherosclerosis.
<b>Dilution</b>	WB~~1:1000
<b>Format</b>	Antigen Affinity Purified from Pooled Serum
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	Anti-5-Lipoxygenase (Ser523) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

The enzyme 5-lipoxygenase (5-LO) plays a key role in regulating the production of leukotrienes (LTs) (Funk, 2001). Overproduction of LTs contributes to several diseases, most notably chronic inflammatory diseases, including asthma (Drazen et al., 1994), fibrosis (Wilborn et al., 1996) and atherosclerosis (Dwyer et al., 2004). Recent work has demonstrated that the activity of 5-LO is regulated by PKA phosphorylation of serine-523 in 5-LO (Luo et al., 2004). Under normal conditions, this phosphorylation may be important in limiting inflammation. Abnormal signaling through cAMP and PKA, then, could contribute to a variety of diseases, including those characterized by chronic inflammation. The phospho-specific antibody to Ser523 on 5-LO is thus likely to provide a valuable tool for studies of the role of 5-LO regulation in diseases such as asthma, fibrosis and atherosclerosis.

## Images



Western blot of rat cortical lysate showing specific immunolabeling of the ~80 kDa doublet of 5-LO phosphorylated at Ser523 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by blot treatment with lambda phosphatase ( $\lambda$ -Ptase, 1200 units for 30 min).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.