

## ARG52216 anti-5 Lipoxygenase phospho (Ser523) antibody

Package: 50 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes 5 Lipoxygenase phospho (Ser523)
Tested Reactivity	Hu, Rat
Predict Reactivity	NHuPrm
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	5 Lipoxygenase
Species	Human
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser523 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	5-lipoxygenase; Arachidonate 5-lipoxygenase; LOG5; 5-LO; EC 1.13.11.34; 5LPG; 5-LOX

### Application Instructions

Application table	Application	Dilution
	WB	1:1000
Application Note	Specific for the ~80k 5-LO phosphorylated at Ser523 in Western blots. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

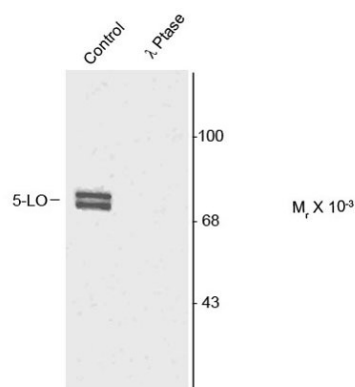
### Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

Database links	<a href="#">GeneID: 240 Human</a> <a href="#">GeneID: 25290 Rat</a> <a href="#">Swiss-port # P09917 Human</a> <a href="#">Swiss-port # P12527 Rat</a>
Gene Symbol	ALOX5
Gene Full Name	arachidonate 5-lipoxygenase
Background	<p>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.</p>
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Metabolism antibody; Signaling Transduction antibody
Calculated Mw	78 kDa
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.

Images



ARG52216 anti-5 Lipoxygenase phospho (Ser523) antibody WB image

Western blot: Rat hippocampal lysate showing phospho-specific immunolabeling of the ~80k doublet of 5-LO phosphorylated at Ser 523 stained with ARG52216 anti-5 Lipoxygenase phospho (Ser523) antibody.