

## Anti-Phospho-5-Lipoxygenase (Ser523) ALOX5 Antibody

Catalog Number: P00847

### About ALOX5

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.

### Overview

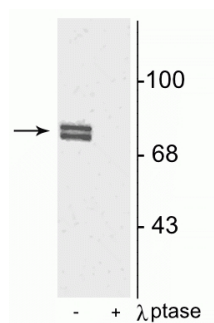
Product Name	Anti-Phospho-5-Lipoxygenase (Ser523) ALOX5 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Phospho-5-Lipoxygenase (Ser523) ALOX5 Antibody (Catalog # P00847). Tested in WB applications. This antibody reacts with Human, Mouse, Rat.
Application	WB
Clonality	Polyclonal 608
Formulation	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.
Storage Instructions	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C. After date of receipt, stable for at least 1 year at -20°C.
Host	Rabbit
Uniprot ID	P09917

### Technical Details

Immunogen	Synthetic phosphopeptide corresponding to amino acid residues surrounding Ser523 of human 5-lipoxygenase (5-LO), conjugated to keyhole limpet hemocyanin (KLH). Immunogen species is Human.
Predicted Reactive Species	Primate
Isotype	IgG
Form	Liquid
Concentration	0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution

	procedure.
Purification	Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>WB: 1:1000</p>

## Anti-Phospho-5-Lipoxygenase (Ser523) ALOX5 Antibody (P00847) 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 (gamma-Ptase, 1200 units for 30 min).

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