

Anti-5-Lipoxygenase (Ser523) Antibody

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

Specification

Anti-5-Lipoxygenase (Ser523) Antibody - Product Information

Primary Accession
Reactivity
Bovine
Host
Clonality
Polyclonal
Isotype

Isotype IgG
Calculated MW 77983

Anti-5-Lipoxygenase (Ser523) Antibody - Additional Information

Gene ID 240

Other Names

5 Lipoxygenase antibody, 5 LO antibody, 5 LOX antibody, 5-lipoxygenase antibody, 5-LO antibody, 5-LOX antibody, 5LOX antibody, arachidonate 5 lipoxygenase antibody, arachidonic 5-lipoxygenase delta-10-13 isoform antibody, arachidonic 5-lipoxygenase delta-p10 isoform antibody, 5LOX antibody,

Target/Specificity

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.

Format

Antigen Affinity Purified from Pooled Serum

Storage

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.

Precautions

Anti-5-Lipoxygenase (Ser523) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping



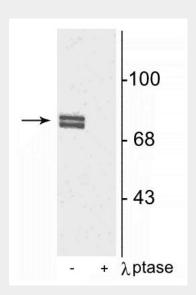
Blue Ice

Anti-5-Lipoxygenase (Ser523) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-5-Lipoxygenase (Ser523) Antibody - 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 (λ -Ptase, 1200 units for 30 min).

Anti-5-Lipoxygenase (Ser523) Antibody - 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.