# Phospho-ALOX5(Ser523) Ab

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| Cat.#: AF0064 | Concn.: 1mg/ml | Mol.Wt.: 77kDa |
| Size: 100ul,200ul | Source: Rabbit | Clonality: Polyclonal |

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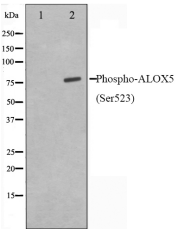
| Application: | WB 1:500-1:2000, IF/ICC 1:100-1:500 |
| Reactivity: | Human,Rat |
| Purification: | The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns. |
| Specificity: | Phospho-ALOX5(Ser523) Ab detects endogenous levels of ALOX5 only when phosphorylated at Sersine 523. |
| Immunogen: | A synthesized peptide derived from human ALOX5 around the phosphorylation site of Ser523. |
| Uniprot: | P09917 |
| Description: | This gene encodes a member of the lipoxygenase gene family and plays a dual role in the synthesis of leukotrienes from arachidonic acid. The encoded protein, which is expressed specifically in bone marrow-derived cells, catalyzes the conversion of arachidonic acid to 5(S)-hydroperoxy-6-trans-8,11,14-cis-eicosatetraenoic acid, and further to the allylic epoxide 5(S)-trans-7,9-trans-11,14-cis-eicosatetrenoic acid (leukotriene A4). Leukotrienes are important mediators of a number of inflammatory and allergic conditions. Mutations in the promoter region of this gene lead to a diminished response to antileukotriene drugs used in the treatment of asthma and may also be associated with atherosclerosis and several cancers. Alternatively spliced transcript variants have been observed, but their full-length nature has not been determined. |
| Subcellular Location: | Cytoplasm. Nucleus matrix. Nucleus membrane. Shuttles between cytoplasm and nucleus. Found exclusively in the nucleus, when phosphorylated on Ser-272. Calcium binding promotes translocation from the cytosol and the nuclear matrix to the nuclear envelope and membrane association. |
| Similarity: | Belongs to the lipoxygenase family. |
| Storage Condition and Buffer: | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt. |




Western blot analysis on HuvEc cell lysates using Phospho-ALOX5(Ser523) Ab,The lane on the left was treated with the antigen-specific peptide.

AF0064 staining HuvEc by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary Ab.

*IMPORTANT:* For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.