

Basic Information

Product Name	Anti-5 Lipoxygenase/AOX5 Antibody
Gene Name	AOX5
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat, rabbit
Tested Application	IHC
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human AOX5 recombinant protein (Position: A120-R483). Human AOX5 shares 94% amino acid (aa) sequence identity with both mouse and rat AOX5.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Dilution Ratios	Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.

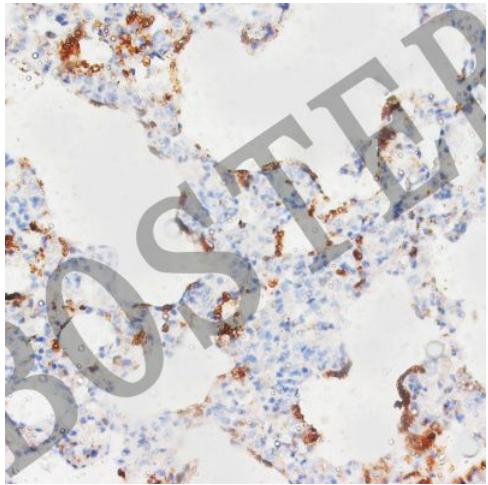
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Arachidonate 5-lipoxygenase, also known as 5-LOX or 5-LO, is an enzyme that in humans is encoded by the AOX5 gene. AOX5 is a member of the lipoxygenase family of enzymes. It is mapped to 10q11.21. AOX5 plays a dual role in the synthesis of leukotrienes from arachidonic acid. The position of AOX5 within the nucleus of resting cells determines the capacity to generate LTB4 upon subsequent activation. It is involved in lung vascular tone regulation and in the development of chronic pulmonary hypertension in hypoxic rodent models. AOX5 also transforms EFAs into leukotrienes and is a current target for pharmaceutical intervention in a number of diseases.

Selected Validation Data



IHC analysis of 5 Lipoxygenase/AOX5 using anti-5 Lipoxygenase/AOX5 antibody (BA1799-1).

5 Lipoxygenase/AOX5 was detected in a paraffin-embedded section of rat lung tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-5 Lipoxygenase/AOX5 Antibody (BA1799-1) at a dilution of 1:200 and developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.