

## Basic Information

Product Name	Anti-5 Lipoxygenase/AOX5 Antibody	
Gene Name	AOX5	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, 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.	
Observed MW	78 kDa	
Dilution Ratios	Western blot (WB): Immunohistochemistry (IHC): (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.	1:500-2000 1:50-400

## 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.

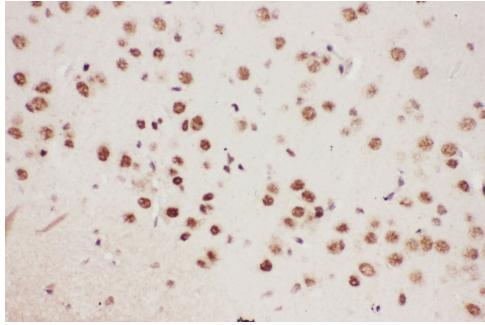
## Reference

Anti-5 Lipoxygenase/AOX5 Antibody被引用在2文献中。

## Selected Validation Data



Western blot analysis of 5 Lipoxygenase/AOX5 using anti-5 Lipoxygenase/AOX5 antibody (PB0008). The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human SGC whole cell lysates. After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-5 Lipoxygenase/AOX5 antigen affinity purified polyclonal antibody (PB0008) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for 5 Lipoxygenase/AOX5 at approximately 78 kDa. The expected band size for 5 Lipoxygenase/AOX5 is at 78 kDa.



IHC analysis of 5 Lipoxygenase/ALOX5 using anti-5 Lipoxygenase/ALOX5 antibody (PB0008).

5 Lipoxygenase/ALOX5 was detected in a paraffin-embedded section of mouse brain tissue. The tissue section was incubated with rabbit anti-5 Lipoxygenase/ALOX5 Antibody (PB0008) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.