### For Research Use Only

# 5 Lipoxygenase Monoclonal antibody

Catalog Number:66326-1-lg Featured Product

7 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 66326-1-lg BC130332 GeneID (NCBI): Concentration: 2000 ug/ml

**UNIPROT ID:** Source: Mouse P09917 Full Name: Isotype:

IgG2a arachidonate 5-lipoxygenase

Calculated MW: Immunogen Catalog Number: AG18168 674 aa, 78 kDa Observed MW:

70-78 kDa

**Applications** 

**Tested Applications:** WB, IHC, ELISA Cited Applications: WB, IHC, IF

Species Specificity: human, pig **Cited Species:** human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: pig spleen tissue, THP-1 cells

IHC: human lung tissue, human spleen tissue

**Purification Method:** 

Protein A purification

Recommended Dilutions:

WB: 1:1000-1:4000 IHC: 1:100-1:400

CloneNo.:

3B1B7

## **Background Information**

ALOX5(arachidonate 5-lipoxygenase) is also named as LOG5, 5-LO and belongs to the lipoxygenase family. It catalyzes the first step in leukotriene biosynthesis, and plays a role in inflammatory processes. It is a 78 kDa ironcontaining enzyme that translocates from the cytosol to associate with FLAP, and converts arachidonate in two steps into the unstable intermediate LTA4. It is essential for cysteinyl-leukotriene (cys-LT) production, critical mediators in asthma (PMID: 12911785).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Hannah Weisser	36114329	Cancer Gene Ther	WB,IF
Robin W Bruckhoff	40011207	ACS Synth Biol	WB
Marius Hyprath	39877387	Front Pharmacol	WB

Storage

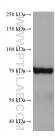
Storage:

Store at -20°C. Stable for one year after shipment.

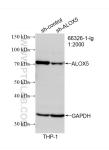
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

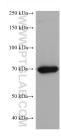
## Selected Validation Data



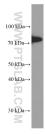
pig spleen tissue were subjected to SDS PAGE followed by western blot with 66326-1-1g (5 Lipoxygenase antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



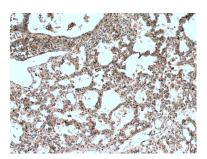
WB result of 5 Lipoxygenase antibody (66326-1-lg; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-5 Lipoxygenase transfected THP-1 cells.



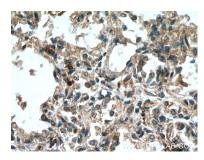
THP-1 cells were subjected to SDS PAGE followed by western blot with 66326-1-1g (5 Lipoxygenase antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



pig spleen tissue were subjected to SDS PAGE followed by western blot with 66326-1-1g (ALOX5 Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human lung tissue slide using 66326-1-Ig (ALOX5 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human lung tissue slide using 66326-1-Ig (ALOX5 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).