

For Research Use Only

# 5 Lipoxygenase Recombinant antibody

Catalog Number:83794-4-RR



## Basic Information

<b>Catalog Number:</b> 83794-4-RR	<b>GenBank Accession Number:</b> BC130332	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 240	<b>CloneNo.:</b> 240740A10
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P09917	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IHC 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> arachidonate 5-lipoxygenase	
<b>Immunogen Catalog Number:</b> AG19503	<b>Calculated MW:</b> 674 aa, 78 kDa	
	<b>Observed MW:</b> 70-78 kDa	

## Applications

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

**Species Specificity:**  
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 :** HL-60 cells, THP-1 cells, human placenta tissue

**IHC :** human ovarian cancer,

## 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 iron-containing 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).

## Storage

**Storage:**

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

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

**\*\*\* 20ul sizes contain 0.1% BSA**

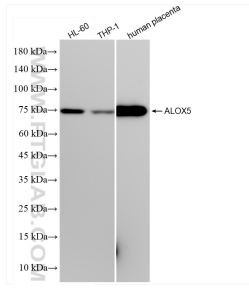
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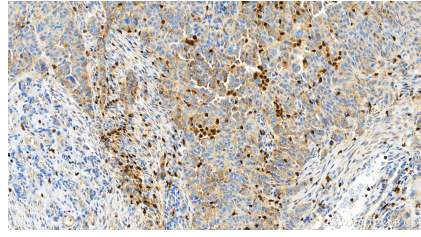
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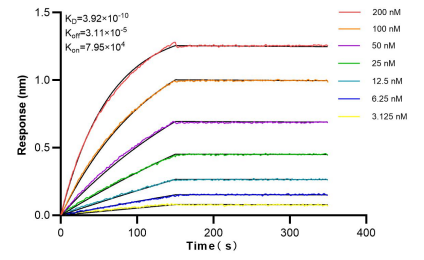
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 83794-4-RR (ALOX5 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human ovarian cancer slide using 83794-4-RR (5 Lipoxigenase antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Bi-layer interferometry (BLI) kinetic assays of 83794-4-RR against Human 5 Lipoxigenase were performed. The affinity constant is 0.392 nM.