

For Research Use Only

# Alpha-1-Antitrypsin Recombinant antibody, PBS Only



Catalog Number: 82918-1-PBS

## Basic Information

<b>Catalog Number:</b> 82918-1-PBS	<b>GenBank Accession Number:</b> BC015642	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1mg/ml	<b>GeneID (NCBI):</b> 5265	<b>CloneNo.:</b> 230109A8
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P01009	
<b>Isotype:</b> IgG	<b>Full Name:</b> serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1	
<b>Immunogen Catalog Number:</b> AG9369	<b>Calculated MW:</b> 418 aa, 47 kDa	
	<b>Observed MW:</b> 47 kDa	

## Applications

**Tested Applications:**  
WB, Indirect ELISA

**Species Specificity:**  
Human

## Background Information

SERPINA1 is the gene for a protein called alpha-1-antitrypsin (AAT), which is a serine protease inhibitor whose targets include elastase, plasmin, thrombin, trypsin, chymotrypsin, and plasminogen activator. AAT is a glycoprotein synthesized primarily by hepatocytes, with smaller amounts synthesized by intestinal epithelial cells, neutrophils, pulmonary alveolar cells and macrophages. AAT is the most abundant, endogenous serine protease inhibitor in blood circulation and it has been implicated in regulating vital fluid phase biological events such as blood coagulation, fibrinolysis, complement activation, apoptosis, reproduction, tumor progression and inflammatory response. The primary function of AAT is thought to be the inactivation of neutrophil elastase and other endogenous serine proteases. Defects in SERPINA1 can cause emphysema or liver disease.

## Storage

**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

For technical support and original validation data for this product please contact:

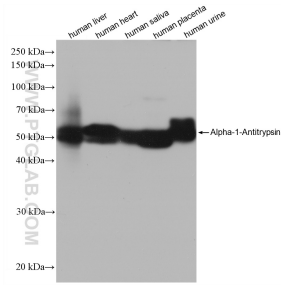
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

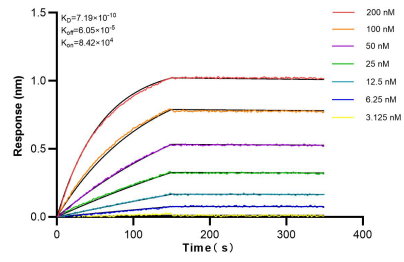
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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 82918-1-RR (Alpha-1-Antitrypsin antibody) at dilution of 1:32000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82918-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 82918-1-RR against Human Alpha-1-Antitrypsin were performed. The affinity constant is  $0.719 \text{ nM}$ .