

For Research Use Only

# CoraLite® Plus 488-conjugated Alpha-1-Antitrypsin Polyclonal antibody

Catalog Number:CL488-16382



## Basic Information

<b>Catalog Number:</b> CL488-16382	<b>GenBank Accession Number:</b> BC015642	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5265	<b>Recommended Dilutions:</b> IF-P 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P01009	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
<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

<b>Tested Applications:</b> IF-P, FC (Intra)	<b>Positive Controls:</b> IF-P : mouse liver tissue,
<b>Species Specificity:</b> human, mouse, rat	

## 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.

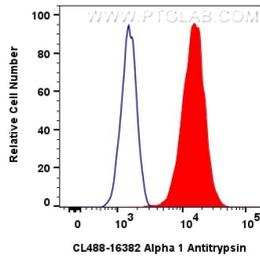
## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.  
Aliquoting is unnecessary for -20°C storage

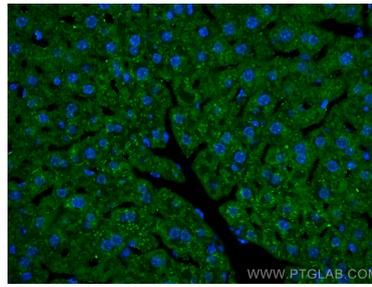
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



1x10<sup>6</sup> HepG2 cells were intracellularly stained with 0.8 ug CoraLite® Plus 488-conjugated Alpha 1 Antitrypsin Polyclonal antibody (CL488-16382) (red), or 0.8 ug CoraLite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-30000) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using CoraLite® Plus 488 Alpha 1 Antitrypsin antibody (CL488-16382) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).