

**Alpha1 Antitrypsin Antibody**  
**Purified Rabbit Polyclonal Antibody**  
**Catalog # ABV11649****Specification**

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**Alpha1 Antitrypsin Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P01009</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	rabbit IgG
Calculated MW	46737

**Alpha1 Antitrypsin Antibody - Additional Information****Gene ID** 5265**Other Names**

Alpha-1 protease inhibitor, Alpha-1-antiproteinase, Serpin A1, AAT, PI

**Target/Specificity**

Alpha1 Antitrypsin

**Formulation**

100 µg (0.5 mg/ml) of antibody in PBS pH 7.2, 0.01 % BSA, 0.03 % ProClin®, and 50 % glycerol.

**Handling**

The antibody solution should be gently mixed before use.

**Background Descriptions****Precautions**

Alpha1 Antitrypsin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Alpha1 Antitrypsin Antibody - Protein Information****Name** SERPINA1 ([HGNC:8941](#))**Synonyms** AAT, PI**Function**

Inhibitor of serine proteases. Its primary target is elastase, but it also has a moderate affinity for plasmin and thrombin. Irreversibly inhibits trypsin, chymotrypsin and plasminogen activator. The aberrant form inhibits insulin-induced NO synthesis in platelets, decreases coagulation time and has proteolytic activity against insulin and plasmin.

**Cellular Location**

Secreted. Endoplasmic reticulum. Note=The S and Z allele are not secreted effectively and accumulate intracellularly in the endoplasmic reticulum

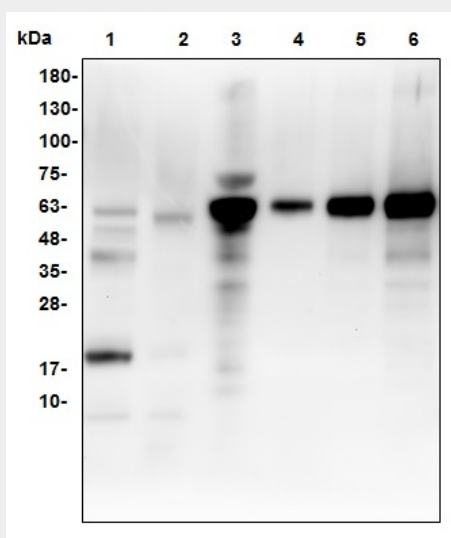
**Tissue Location**

Ubiquitous. Expressed in leukocytes and plasma.

**Alpha1 Antitrypsin Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Alpha1 Antitrypsin Antibody - Images**

Western blot with human alpha1 anti-trypsin antibody: Lane1: 22ug M.muscle; Lane2: 60ug R.kidney; Lane3: 1ug Human serum; Lane4: 2ng H alpha1 antitrypsin; Lane5: 10ng H alpha1 antitrypsin; Lane6: 50ng H alpha1 antitrypsin.

**Alpha1 Antitrypsin Antibody - Background**

Alpha 1 Antitrypsin is an acute-phase plasma protein found at 290 mg per 100 ml. It functions as a serine protease inhibitor with targets like elastase, plasmin, collagenase, thrombin, leucocyte proteases, trypsin, chymotrypsin, and plasminogen activator. Clinically, its deficiency is associated with two major diseases: pulmonary emphysema and early onset/juvenile hepatic cirrhosis. It is elevated in inflammatory conditions, malignancies, liver disease and pregnancy and also after surgical trauma and use of oral contraceptives. The simultaneous quantitative determination of alpha-1-PI and ceruloplasmin permits differential diagnosis of liver afflictions. Rise in alpha 1 antitrypsin occurs as an acute phase response to tissue necrosis and inflammation.