

# **Alpha1 Antitrypsin Antibody**

Purified Rabbit Polyclonal Antibody Catalog # ABV11649

## **Specification**

# **Alpha1 Antitrypsin Antibody - Product Information**

Application WB
Primary Accession P01009

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**

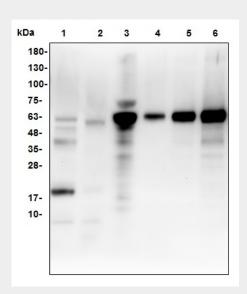
Ubiquitous. Expressed in leukocytes and plasma.

# **Alpha1 Antitrypsin Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- 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-Pl and ceruloplasmin permits differential diagnosis of liver afflictions. Rise in alpha 1 antitrypsin occurs as an acute phase response to tissue necrosis and inflammation.