

AAT Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1290a

Specification

AAT Antibody - Product Information

Application	WB
Primary Accession	P01009
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	47kDa KDa

Description

AAT, also known as SERPINA1; serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1. It is secreted and is a serine protease inhibitor whose targets include elastase, plasmin, thrombin, trypsin, chymotrypsin, and plasminogen activator. Severe Serpin A1 deficiency leads to several clinical complications such as pulmonary emphysema, juvenile hepatitis, cirrhosis and hepatocellular carcinoma.

Immunogen

Purified recombinant fragment of human AAT expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

AAT Antibody - Additional Information

Gene ID 5265

Other Names

Alpha-1-antitrypsin, Alpha-1 protease inhibitor, Alpha-1-antiproteinase, Serpin A1, Short peptide from AAT, SPAAT, SERPINA1, AAT, PI

Dilution

WB~~1/500 - 1/2000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

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

AAT 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.

AAT 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](#)

AAT Antibody - Images

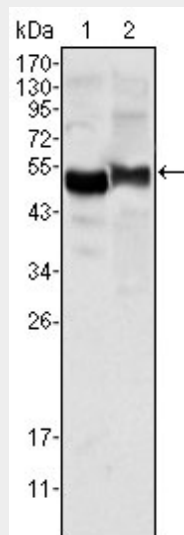


Figure 1: Western blot analysis using AAT mouse mAb against human plasma (1) and NIH/3T3 cell lysate (2).

AAT Antibody - References

1. J Proteome Res. 2005 Nov-Dec;4(6):2070-80.
2. Neuro Endocrinol Lett. 2008 Aug;29(4):482-4.