

## ARG40840 anti-alpha 1 Antitrypsin antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes alpha 1 Antitrypsin
Tested Reactivity	Ms, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	alpha 1 Antitrypsin
Species	Rat
Immunogen	Recombinant protein corresponding to K211-R411 of Rat alpha 1 Antitrypsin.
Conjugation	Un-conjugated
Alternate Names	Serpin A1; alpha1AT; Alpha-1-antiproteinase; Alpha-1 protease inhibitor; AAT; A1A; A1AT; PRO2275; Alpha-1-antitrypsin; PI1; PI; SPAAT

### Application Instructions

Application table	Application	Dilution
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

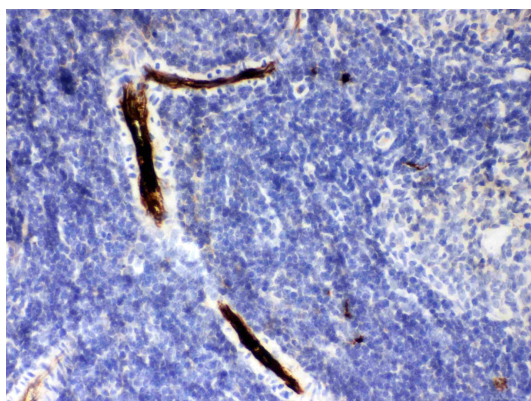
### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

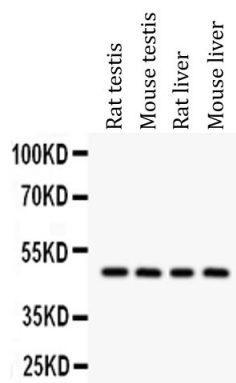
Gene Symbol	SERPINA1
Gene Full Name	serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1
Background	The protein encoded by this gene is secreted and is a serine protease inhibitor whose targets include elastase, plasmin, thrombin, trypsin, chymotrypsin, and plasminogen activator. Defects in this gene can cause emphysema or liver disease. Several transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]
Function	<p>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.</p> <p>Short peptide from AAT: reversible chymotrypsin inhibitor. It also inhibits elastase, but not trypsin. Its major physiological function is the protection of the lower respiratory tract against proteolytic destruction by human leukocyte elastase (HLE). [UniProt]</p>
Calculated Mw	47 kDa
PTM	<p>N-glycosylated. Differential glycosylation produces a number of isoforms. N-linked glycan at Asn-107 is alternatively di-antennary, tri-antennary or tetra-antennary. The glycan at Asn-70 is di-antennary with trace amounts of tri-antennary. Glycan at Asn-271 is exclusively di-antennary. Structure of glycans at Asn-70 and Asn-271 is Hex5HexNAc4. The structure of the antennae is Neu5Ac(alpha1-6)Gal(beta1-4)GlcNAc attached to the core structure Man(alpha1-6)[Man(alpha1-3)]Man(beta1-4)GlcNAc(beta1-4)GlcNAc. Some antennae are fucosylated, which forms a Lewis-X determinant.</p> <p>Proteolytic processing may yield the truncated form that ranges from Asp-30 to Lys-418. [UniProt]</p>
Cellular Localization	Secreted. Endoplasmic reticulum. Note=The S and Z allele are not secreted effectively and accumulate intracellularly in the endoplasmic reticulum. Short peptide from AAT: Secreted, extracellular space, extracellular matrix. [UniProt]

## Images



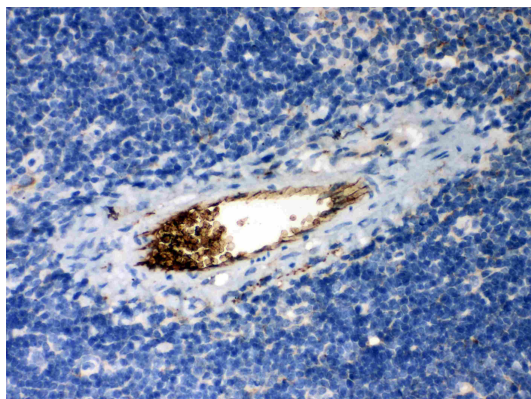
ARG40840 anti-alpha 1 Antitrypsin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat spleen tissue stained with ARG40840 anti-alpha 1 Antitrypsin antibody.



ARG40840 anti-alpha 1 Antitrypsin antibody WB image

Western blot: 50 µg of Rat testis, Mouse testis, Rat liver and Mouse liver lysates stained with ARG40840 anti-alpha 1 Antitrypsin antibody at 0.5 µg/ml dilution.



ARG40840 anti-alpha 1 Antitrypsin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse spleen tissue stained with ARG40840 anti-alpha 1 Antitrypsin antibody.