

ARG40878 anti-alpha 1 Antitrypsin antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes alpha 1 Antitrypsin
Tested Reactivity	Hu
Tested Application	ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	alpha 1 Antitrypsin
Species	Human
Immunogen	Synthetic peptide derived from Human 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
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:30
	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.	
Positive Control	Human fetal kidney	
Observed Size	~ 52 kDa	

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
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. 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.

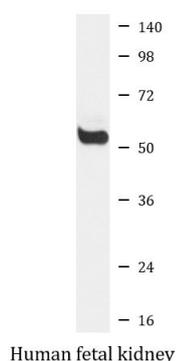
Note

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



ARG40878 anti-alpha 1 Antitrypsin antibody WB image

Western blot: Human fetal kidney lysate stained with ARG40878 anti-alpha 1 Antitrypsin antibody.