

## ARG40794 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, Ms  |
| Tested Application  | ICC/IF, IHC-P, WB   |
| Host                | Rabbit  |
| Clonality           | Polyclonal  |
| Isotype             | IgG   |
| Target Name         | alpha 1 Antitrypsin   |
| Species             | Human   |
| Immunogen           | Recombinant fusion protein corresponding to aa. 25-315 of Human alpha 1 Antitrypsin (NP_000286.3).                                    |
| 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   |
|                   | 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  | SKOV3  |                |
| Observed Size     | 46 kDa   |                |

### Properties

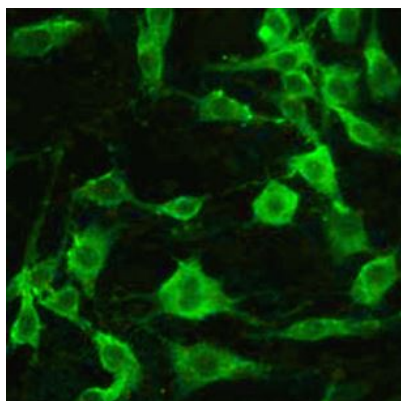
|                     |   |
|---------------------|---|
| Form                | Liquid  |
| Purification        | Affinity purified.  |
| Buffer              | PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.  |
| Preservative        | 0.02% Sodium azide  |
| Stabilizer          | 50% Glycerol  |
| 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

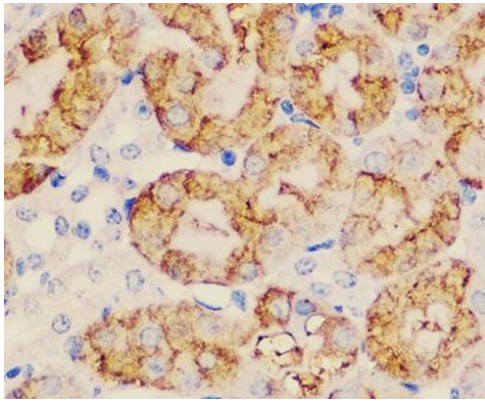
|                       |   |
|-----------------------|---|
| Gene Symbol           | SERPINA1  |
| Gene Full Name        | serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1   |
| Background            | The protein encoded by this gene is secreted and is a serine protease 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



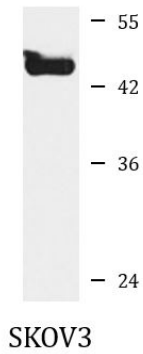
ARG40794 anti-alpha 1 Antitrypsin antibody ICC/IF image

Immunofluorescence: PC-12 cells stained with ARG40794 anti-alpha 1 Antitrypsin antibody at 1:100 dilution.



ARG40794 anti-alpha 1 Antitrypsin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse kidney tissue stained with ARG40794 anti-alpha 1 Antitrypsin antibody at 1:100 dilution.



ARG40794 anti-alpha 1 Antitrypsin antibody WB image

Western blot: 25 µg of SKOV3 cell lysate stained with ARG40794 anti-alpha 1 Antitrypsin antibody at 1:1000 dilution.