

**Anti-ALPHA-1-ANTI-TRYPSIN (Human Plasma) (GOAT) Antibody**  
**Alpha-1-Anti-Trypsin Antibody**  
**Catalog # ASR3912****Specification****Anti-ALPHA-1-ANTI-TRYPSIN (Human Plasma) (GOAT) Antibody - Product Information**

|                       |  |
|-----------------------|--|
| Host                  | Goat   |
| Conjugate             | Unconjugated   |
| Target Species        | Human  |
| Reactivity            | Human  |
| Clonality             | Polyclonal   |
| Application           | WB, E, I, LCI  |
| Application Note      | Anti-Alpha-1-Anti-trypsin Antibody has been tested by ELISA and western blot. This product has been assayed against 1.0 ug of Alpha-1-Anti-trypsin [Human Plasma] in a standard ELISA using Peroxidase conjugated Affinity Purified anti-Goat IgG [H&L] (Goat) code #611-1302 and (ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:2,000 to 1:10,000 of the reconstitution concentration is suggested. |
| Physical State        | Lyophilized  |
| Buffer                | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2   |
| Immunogen             | a1-Anti-Trypsin [Human Plasma]   |
| Reconstitution Volume | 100 µL   |
| Reconstitution Buffer | Restore with deionized water (or equivalent)   |
| Preservative          | 0.01% (w/v) Sodium Azide   |

**Anti-ALPHA-1-ANTI-TRYPSIN (Human Plasma) (GOAT) Antibody - Additional Information****Gene ID** 5265**Other Names**  
5265**Purity**

Anti-ALPHA-1-ANTI-TRYPSIN is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum as well as purified and partially purified a1-Anti-Trypsin [Human Plasma]. Cross reactivity against a1-Anti-Trypsin from other sources is unknown.

**Storage Condition**

Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

**Anti-ALPHA-1-ANTI-TRYPSIN (Human Plasma) (GOAT) 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.

**Anti-ALPHA-1-ANTI-TRYPSIN (Human Plasma) (GOAT) 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](#)

**Anti-ALPHA-1-ANTI-TRYPSIN (Human Plasma) (GOAT) Antibody - Images****Anti-ALPHA-1-ANTI-TRYPSIN (Human Plasma) (GOAT) Antibody - Background**

Alpha-1-Antitrypsin (AAT) is an inhibitor of serine proteases. Its primary target is elastase, but it also has a moderate affinity for plasmin and thrombin. It 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. Short peptide from AAT is 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).