

**Anti-ALPHA-1-ANTI-TRYPSIN (Human Plasma) (GOAT) Antibody**  
**Alpha-1-Anti-Trypsin Antibody**  
**Catalog # ASR3608****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, IHC, E, I, LCI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Application Note      | Anti-Alpha-1-AntiTrypsin has been tested by western blot and is suitable to be 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] (Rabbit) code #605-4302 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 1:7,000 to 1:30,000 of the reconstitution concentration is suggested for this product. |
| 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 | 2.0 mL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 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**

This product was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-goat serum, 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**

Rockland primary and Dylight conjugated secondary antibodies were used to detect: Human transferrin (1° 109-4134, green 2° 611-743-127); Alpha 1 anti trypsin (1° 100-101-147, red 2° 605-742-125); and Human IgG (1° 109-3102, Blue 2° 610-741-124 in a multiplex fluorescent western blot of human serum. Each primary antibody was diluted to 1:1000 in Blocking Buffer for Fluorescent Western Blotting - MB-070 and incubated for 2 hrs at RT. Blot was 3X in TTBS, 1X in TBS and probed with secondary antibodies diluted 1:10000 in MB-070 and incubated ~ 1hr at 4 degrees. After wash 2X in TTBS and 2X in TBS, blot was rinsed 2X in MeOH, dried and imaged using the Biorad VersaDoc4000.

#### **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).