

**Anti-ALPHA-1-ANTI-TRYPSIN (Human Plasma) (GOAT) Antibody Peroxidase Conjugated**  
**Alpha-1-Anti-Trypsin Antibody Peroxidase Conjugated**  
**Catalog # ASR3973****Specification****Anti-ALPHA-1-ANTI-TRYPSIN (Human Plasma) (GOAT) Antibody Peroxidase Conjugated - Product Information**

Host	Goat
Conjugate	Peroxidase (Horseradish)
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	Anti-Alpha 1 anti-Trypsin Antibody is tested by ELISA and western blot. This product detects a single band of the expected apparent molecular weight (~47 kDa) and for ELISA. Researchers should determine optimal titers for applications that are not stated below.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Anti-alpha 1 Anti-Trypsin Antibody was produced by repeated immunizations with native $\alpha$ 1-Anti-Trypsin protein from human plasma.
Reconstitution Volume	100 $\mu$ L
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Gentamicin Sulfate. Do NOT add Sodium Azide!

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

Anti-alpha-1-Anti-Trypsin Antibody 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-Peroxidase, anti-Goat Serum as well as purified and partially purified  $\alpha$ 1-Anti-Trypsin [Human Plasma]. Cross reactivity against  $\alpha$ 1-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 Peroxidase Conjugated - 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 Peroxidase Conjugated - 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 Peroxidase Conjugated - Images****Anti-ALPHA-1-ANTI-TRYPSIN (Human Plasma) (GOAT) Antibody Peroxidase Conjugated - Background**

Anti-Alpha 1-Anti-Trypsin Antibody detects  $\alpha$ 1-Anti-Trypsin protein.  $\alpha$ 1-Anti-Trypsin is an inhibitor of serine proteases. Its primary target is elastase, but it also has a moderate affinity for plasmin and thrombin. Anti-Trypsin irreversibly inhibits trypsin, chymotrypsin and plasminogen activator. The aberrant form of Antitrypsin inhibits insulin-induced NO synthesis in platelets, decreases coagulation time and has proteolytic activity against insulin and plasmin. Defects in SERPINA1 are

the cause emphysema, liver cirrhosis and liver failure. Environmental factors, particularly cigarette smoking, greatly increase the risk of emphysema at an earlier age. Anti-Alpha-1-Anti-Trypsin Antibody is ideal for investigators involved in Cell Signaling, Signal Transduction and Cancer research.