

## Datasheet for 200-106-147

## Alpha-1-Anti-Trypsin Antibody Biotin Conjugated

### Overview

<b>Description:</b>	Anti-Alpha-1-Anti-Trypsin (Human Plasma) (GOAT) Antibody Biotin Conjugated (BULK ORDER) - 200-106-147
<b>Item No.:</b>	200-106-147
<b>Size:</b>	10 mg
<b>Applications:</b>	ELISA, WB
<b>Reactivity:</b>	Human
<b>Host Species:</b>	Goat

### Product Details

<b>Background:</b>	A member of the serpin family, Anti-Alpha-1-Anti-Trypsin inhibits serine proteases. With a moderate affinity for plasmin and thrombin, Anti-Alpha-1-Anti-Trypsin antibody mainly targets elastase. It inhibits trypsin, chymotrypsin and plasminogen activator by inhibiting insulin-induced NO synthesis. It also decreases coagulation time and has proteolytic activity against insulin and plasmin. The short peptide from AAT also targets elastase, but not trypsin. Anti-Alpha-1-Anti-Trypsin is ideal for researchers involved in Metabolism, Cancer, and Cardiovascular research.
<b>Synonyms:</b>	goat anti-Alpha-1-Trypsin Antibody biotin Conjugation, biotin Conjugated goat anti-Alpha-1-Trypsin Antibody, A1AT antibody, AAT antibody, Alpha 1 antiprotease antibody, Alpha 1 antitrypsin antibody, Alpha 1 protease inhibitor antibody
<b>Host Species:</b>	Goat
<b>Conjugate:</b>	Biotin
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG
<b>F/P Ratio:</b>	10-20

### Target Details

<b>Gene Name:</b>	SERPINA1
<b>Reactivity:</b>	Human

<b>Immunogen Type:</b>	Native Protein
<b>Immunogen:</b>	a1-Anti-Trypsin [Human Plasma]
<b>Purity/Specificity:</b>	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-Biotin, anti-Goat Serum as well as purified and partially purified a-1-anti-Trypsin [Human Plasma]. Cross reactivity against a-1-anti-Trypsin from other sources is unknown.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P01009</a></li><li>• <a href="#">NCBI - P01009.3</a></li><li>• <a href="#">GeneID - 5265</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ELISA, WB
<b>Application Note:</b>	Anti-Alpha-1-Anti-Trypsin has been tested by ELISA and western blot. This product is assayed against 1.0 ug of a-1-anti-Trypsin in a standard capture ELISA using Peroxidase Conjugated Streptavidin #S000-03 and ABTS (2,2'-azino-bis-[3-ethylbenthiiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:8,000 to 1:29,000 of the reconstitution concentration is suggested for this product.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:50,000
<b>WB:</b>	1:2,000 - 1:10,000

## Formulation

<b>Physical State:</b>	Lyophilized
<b>Concentration:</b>	1.0 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.01% (w/v) Sodium Azide
<b>Stabilizer:</b>	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
<b>Reconstitution Volume:</b>	1.0 mL
<b>Reconstitution Buffer:</b>	Restore with deionized water (or equivalent)

## Shipping & Handling

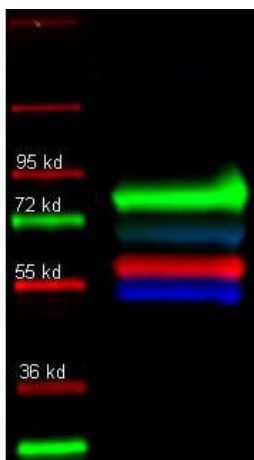
<b>Shipping Condition:</b>	Ambient
<b>Storage Condition:</b>	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Images



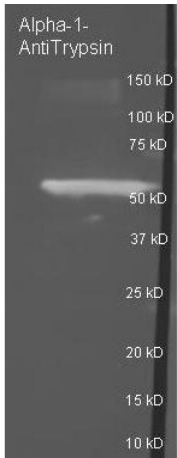
### Western Blot

Western Blot of Anti-Trypsin Polyclonal Antibody-Multiplex Fluorescent Western blot. Lane 1: molecular weight. Lane 2: Alpha-1-Anti-Trypsin (red), Rabbit anti-Transferrin, and Mouse-a-GST were used in a multiplex system to detect target proteins under reducing conditions in albumin depleted human serum with 320 ng of added GST. Load: 35 µg per lane. Primary antibody: Each primary antibody at 1:1000 for overnight at 4°C. Secondary antibody: DyLight549 Donkey anti-Rabbit IgG (green), DyLight 488 Donkey anti-Mouse IgG (blue), and DyLight 649 Donkey anti-Goat IgG (red) secondary antibody at 1:10,000 for 30 min at RT. Block: MB-070 at 30 min RT.



### Western Blot

Western Blot of goat anti-Alpha 1 anti trypsin antibody. Lane 1: molecular weight. Lane 2: Human transferrin (green); Alpha 1 anti trypsin (red); and Human IgG (Blue) in a multiplex fluorescent western blot of human serum. Load: 35 µg per lane. Primary antibody: Each primary antibody was diluted to 1:1000 for overnight at 4°C. Secondary antibody: Rabbit IgG (H&L) Antibody DyLight™ 649 Conjugated (green), Goat IgG (H&L) Antibody DyLight™ 549 Conjugated (red), Mouse IgG (H&L) Antibody DyLight™ 488 Conjugated (blue) secondary antibody at 1:10,000 for ~ 1hr at 4 degrees. Block: Blocking Buffer for Fluorescent Western Blotting - MB-070 overnight at 4°C

**Western Blot**

Western Blot of Goat anti Alpha-1 anti-Trypsin antibody.

Lane 1: Alpha-1 anti-Trypsin under reducing conditions.

Lane 2: none. Load: 1  $\mu$ g per lane. Primary antibody:

Alpha-1 anti-Trypsin antibody at 1:3000 for overnight at 4°C.

Secondary antibody: Dylight 488 conjugated Donkey anti

goat secondary antibody at 1:10,000 for 45 min at RT. Block:

MB-070 overnight at 4°C. Predicted/Observed size: 55kDa

for  $\alpha$ -1 Anti-Trypsin. Other band(s): none.

**Disclaimer**

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.