

# Human Alpha-1 AntiTrypsin Protein (A1AT)

## Certificate of Analysis and Data Sheet

➤ <b>Source:</b> E.Coli	➤ <b>Catalog No.</b> PRO-289
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### ➤ **Background:**

alpha-1-AntiTrypsin (alpha-1-AT) exists in a number of genetic variants. MM variant is the most common. Alpha-1-AT is synthesized in the liver and it acts as an inhibitor of proteases such as trypsin, elastase, chymotrypsin, collagenase, leucocytic proteases, plasmin, and thrombin, which may be released during inflammatory reactions in the lung. In the absence of alpha-1-AT, these enzymes are not inhibited and they may digest pulmonary parenchyma.

### ➤ **Description :**

Recombinant A1AT shows a band at 54kDa on SDS-PAGE coomassie blue stained gel. Recombinant alpha-1-AntiTrypsin is purified by proprietary chromatographic techniques.

### ➤ **Physical Appearance:**

Sterile filtered liquid.

### ➤ **Formulation:**

Human alpha-1-AntiTrypsin protein at 100µg/ml in 50mM Tris-Acetate, pH7.5, 1mM EDTA, 20% Glycerol without BSA and Sodium Azide.

### ➤ **Stability:**

Store vial at -20C° to -80C°. When stored at the recommended temperature, A1AT is stable for 12 months.

**Please avoid freeze-thaw cycles.**

### ➤ **Purity:**

Greater than 90.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by reducing and non-reducing SDS-PAGE coomassie blue gel.

### ➤ **Dimers and aggregates:**

Less than 1% as determined by coomassie blue SDS-PAGE gel analysis.

### ➤ **Endotoxin:**

Less than 0.1 ng/µg (IEU/µg) of Human A1AT.

### ➤ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.