

## Polyclonal Anti- alpha 1-antitrypsin, A1AT

**Catalog#** BPA1003

**Lot #** Check on the product label

**Size** 100 µg

**Isotype** IgG

**Host** Rabbit

### Reactivity

Human

**Product Form** Liquid

**Purification** Immunogen affinity purified

### Immunogen

A synthetic peptide (conjugated to KLH) corresponding to the region of human alpha 1-antitrypsin.

### Recommend Application

[Western Blot, WB \(1:500\)](#)

Other applications have not been tested.

The optimal dilutions should be determined by end user.

### Storage Buffer

1\*PBS (pH7.4), 0.2% BSA, 40% Glycerol.  
Preservative: 0.05% Sodium Azide.

### Storage Instruction

Store at 4°C after thawing (1 week).  
Aliquot and store at -20°C for long term (at least one year).

Avoid repeated freeze and thaw cycles.

### Background

alpha 1-antitrypsin(A1AT) is a protease inhibitor belonging to the serpin superfamily. <sup>[1]</sup> It is generally known as serum trypsin inhibitor. A1AT is a 52-kDa serpin with a characteristic secondary

structure of beta sheets and alpha helices. Disorders of this protein include alpha 1-antitrypsin deficiency, causes the degradation especially of lung tissue, and eventually leads to characteristic manifestations of pulmonary emphysema. <sup>[2]</sup> As A1AT is expressed in the liver, certain mutations in the gene encoding the protein can cause misfolding and impaired secretion, which can lead to liver cirrhosis.

### Reference

1. Gettins PG (2002). "Serpins: structure, mechanism, and function". *Chem Rev* 102 (12): 4751–804.
2. DeMeo DL, Silverman EK (2004). "α1-Antitrypsin deficiency · 2: Genetic aspects of α1-antitrypsin deficiency: phenotypes and genetic modifiers of emphysema risk". *Thorax* 59 (3): 259–64.

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