

### Human alpha 1 Antitrypsin ELISA Kit (SERPINA1) ab108798

[4 References](#) [2 图像](#)

#### 概述

**产品名称** 人alpha 1 Antitrypsin ELISA试剂盒(SERPINA1)

**检测方法** Colorimetric

**精确度** 批次内

样品	n	Mean	SD	CV%
Overall				6%

批次间

样品	n	Mean	SD	CV%
Overall				10.6%

**样品类型** Serum, Plasma

**检测类型** Competitive

**灵敏度** = 0.12 µg/ml

**范围** 0.625 µg/ml - 40 µg/ml

**回收率** 97 %

**检测时间** 3h 00m

**实验步骤** Multiple steps standard assay

**种属反应性** 与反应: Human

**产品概述** alpha 1 Antitrypsin (SERPINA1) Human *in vitro* competitive ELISA (Enzyme-Linked Immunosorbent Assay) kit (ab108798) is designed for the quantitative measurement of alpha 1 antitrypsin levels in plasma and serum.

An alpha 1 antitrypsin specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently biotinylated alpha 1 Antitrypsin is added and then followed by washing with wash buffer. Streptavidin-Peroxidase Complex is added and unbound conjugates are washed away with wash buffer. TMB is then used to visualize Streptavidin-Peroxidase enzymatic reaction. TMB is catalyzed by Streptavidin-Peroxidase to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is inversely proportional to the amount of alpha 1 antitrypsin captured in plate.

Get results in 90 minutes with Human alpha 1 Antitrypsin ELISA Kit (SERPINA1) ([ab189579](#)) from our SimpleStep ELISA® range.

**The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid repeated freeze-thaw cycles.**

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平台 Microplate

## 性能

存放说明 Store at -20°C. Please refer to protocols.

组件	1 x 96 tests
100X Streptavidin-Peroxidase Conjugate	1 x 80µl
10X Diluent N Concentrate	1 x 30ml
20X Wash Buffer Concentrate	1 x 30ml
1X Biotinylated Human alpha 1 Antitrypsin (Lyophilized)	1 vial
alpha 1 Antitrypsin Microplate (12 x 8 well strips)	1 unit
alpha 1 Antitrypsin Standard	1 vial
Chromogen Substrate	1 x 7ml
Sealing Tapes	3 units
Stop Solution	1 x 11ml

**功能** 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.  
Short peptide from AAT: 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).

**组织特异性** Ubiquitous. Expressed in leukocytes and plasma.

**疾病相关** Alpha-1-antitrypsin deficiency

**序列相似性** Belongs to the serpin family.

**结构域** The reactive center loop (RCL) extends out from the body of the protein and directs binding to the target protease. The protease cleaves the serpin at the reactive site within the RCL, establishing a covalent linkage between the carboxyl group of the serpin reactive site and the serine hydroxyl of the protease. The resulting inactive serpin-protease complex is highly stable.

## 翻译后修饰

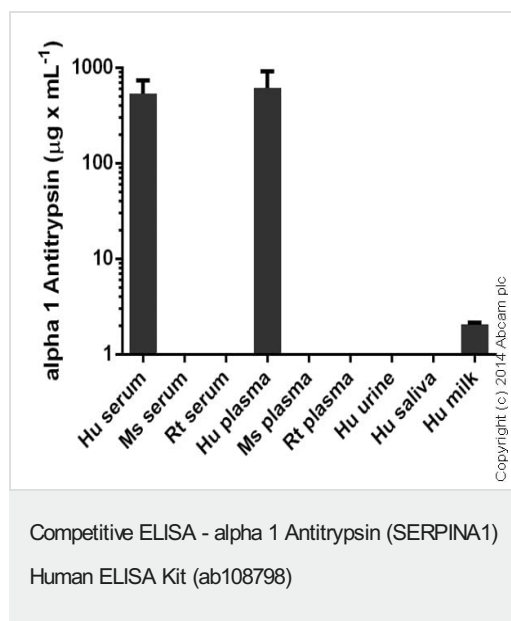
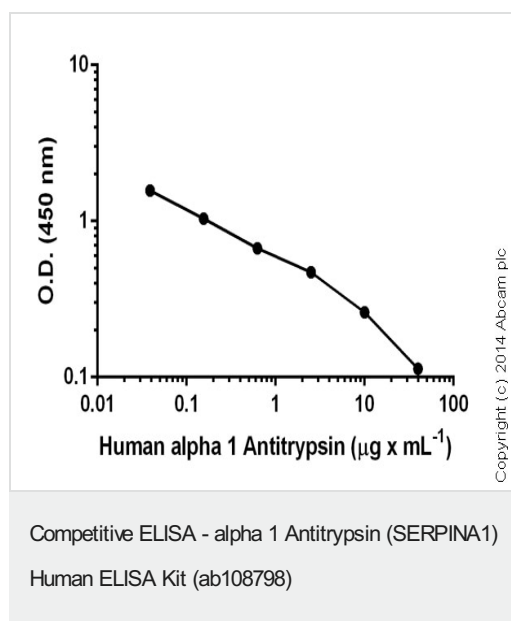
N-glycosylated. Differential glycosylation produces a number of isoforms. N-linked glycan at Asn-107 is alternatively di-antennary, tri-antennary or tetra-antennary. The glycan at Asn-70 is di-antennary with trace amounts of tri-antennary. Glycan at Asn-271 is exclusively di-antennary. Structure of glycans at Asn-70 and Asn-271 is Hex5HexNAc4. The structure of the antennae is Neu5Ac(alpha1-6)Gal(beta1-4)GlcNAc attached to the core structure Man(alpha1-6)[Man(alpha1-3)]Man(beta1-4)GlcNAc(beta1-4)GlcNAc. Some antennae are fucosylated, which forms a Lewis-X determinant.

Proteolytic processing may yield the truncated form that ranges from Asp-30 to Lys-418.

## 细胞定位

Secreted. Endoplasmic reticulum. The S and Z allele are not secreted effectively and accumulate intracellularly in the endoplasmic reticulum and Secreted, extracellular space, extracellular matrix.

## 图片



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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