

Human alpha 1 Antitrypsin ELISA Kit (SERPINA1) ab108799

★★★★★ 1 Abreviews 20 References 6 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
	Overall			5.3%
	批次间			
	样品	n	Mean	SD
	Overall			10.3%
样品类型	Saliva, Milk, Urine, Serum, Plasma, Cerebral Spinal Fluid			
检测类型	Sandwich (quantitative)			
灵敏度	= 0.31 ng/ml			
范围	0.391 ng/ml - 25 ng/ml			
回收率	103 %			
检测时间	4h 00m			
实验步骤	Multiple steps standard assay			
种属反应性	与反应: Human			
产品概述	<p>Human alpha 1 Antitrypsin ELISA kit (SERPINA1) (ab108799) is a sandwich ELISA kit for the quantitative measurement of alpha 1 Antitrypsin in plasma, serum, milk, urine, saliva and CSF samples.</p> <p>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 an alpha 1 antitrypsin specific biotinylated detection antibody is added and then followed by washing with wash buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with wash buffer. TMB is then used to visualize HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is directly proportional to the amount of alpha 1 antitrypsin captured in plate.</p>			

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.

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	2 x 30ml
40X Biotinylated Human alpha 1 Antitrypsin Antibody	1 x 150µl
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

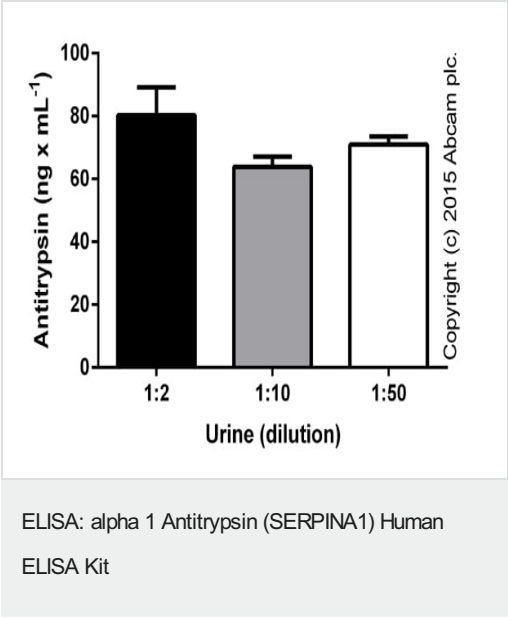
序列相似性 Belongs to the serpin family.

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.

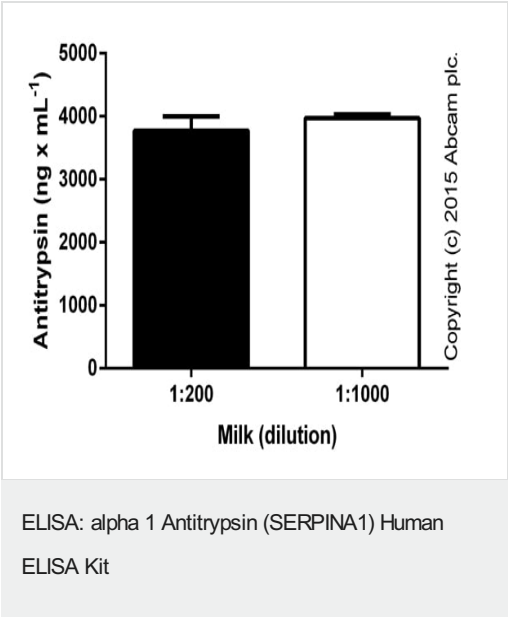
翻译后修饰 N-glycosylated. Differential glycosylation produces a number of isoforms. N-linked glycan at Asn-107 is alternatively di-antennary, tri-antennary or tetra-antennary. The glycan at Asn-70 is di-antennary with trace amounts of tri-antennary. Glycan at Asn-271 is exclusively di-antennary.

	<p>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.</p> <p>Proteolytic processing may yield the truncated form that ranges from Asp-30 to Lys-418.</p>
细胞定位	<p>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.</p>

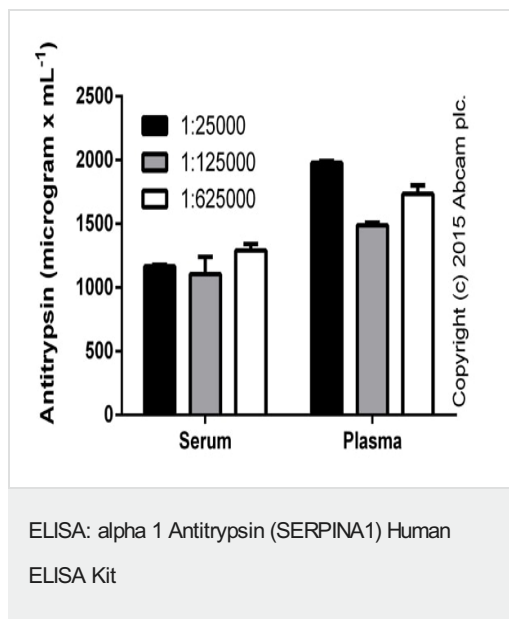
图片



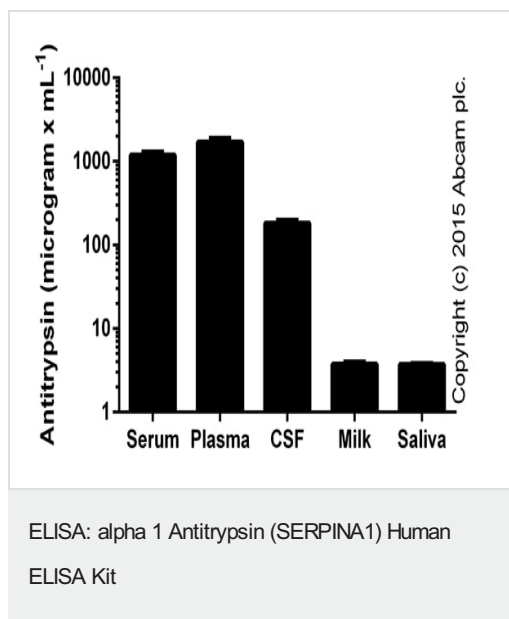
Linearity: alpha 1 antitrypsin in urine at different diutions, corrected for the factor of dilution (duplicates +/- SD).



Linearity: alpha 1 antitrypsin in human milk at different diutions, corrected for the factor of dilution (duplicates +/- SD)

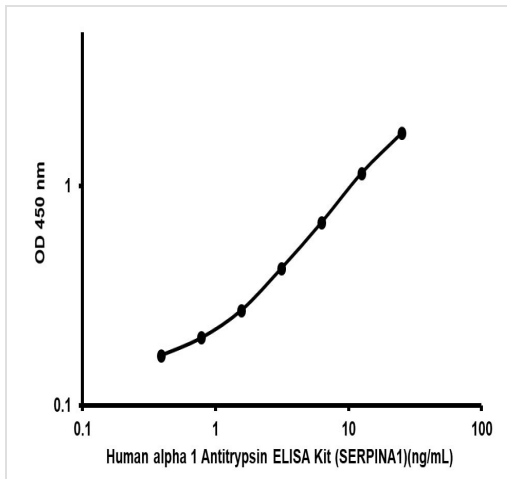


Linearity: alpha 1 antitrypsin in serum and plasma (Li-heparine) at different diutions, corrected for the factor of dilution (duplicates +/- SD)



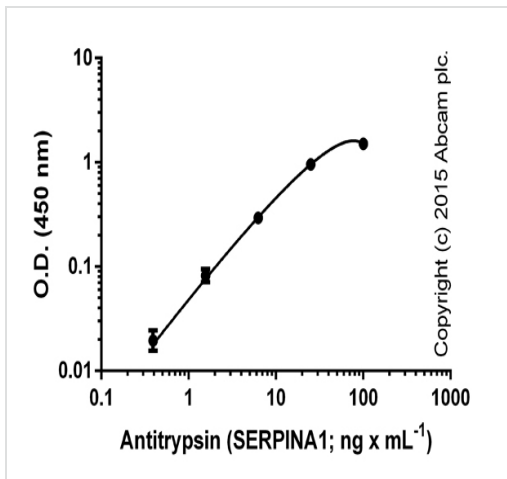
Alpha 1 antitrypsin in human biological fluids (duplicates +/- SD).

The samples were tested in different ranges of dilutions (serum and Li-heparine plasma: 2e3-1e6; CSF: 5e3-5e4; milk: 1e2-1e3; saliva: 2e2-2e3).



Representative Standard Curve using ab108799

Typical Standard Curve for ab108799 Human alpha 1 Antitrypsin ELISA kit



Standard curve with background signal subtracted (duplicates; +/- SD).

ELISA: alpha 1 Antitrypsin (SERPINA1) Human ELISA Kit

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