

Product datasheet

Human alpha 1 Antitrypsin ELISA Kit (SERPINA1) ab108799

 1 Abreviews 20 References 画像数 6

製品の概要

製品名	Human alpha 1 Antitrypsin ELISA Kit (SERPINA1)			
検出方法	Colorimetric			
再現性	Intra-Assay(同時再現性)			
サンプル	N	平均値	SD	CV%
Overall				5.3%
Inter-Assay(日差再現性)				
サンプル	N	平均値	SD	CV%
Overall				10.3%
サンプルの種類	Saliva, Milk, Urine, Serum, Plasma, Cerebral Spinal Fluid			
アッセイタイプ	Sandwich (quantitative)			
検出感度	= 0.31 ng/ml			
検出範囲	0.391 ng/ml - 25 ng/ml			
添加回収試験	103 %			
全工程の試験時間	4h 00m			
ステップ	Multiple steps standard assay			
種交差性	交差種: Human			
製品の概要	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.			

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.

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.

試験プラットフォーム

Microplate

製品の特性

保存方法

Store at -20°C. Please refer to protocols.

内容	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

機能

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).

組織特異性

Ubiquitous. Expressed in leukocytes and plasma.

関連疾患

Alpha-1-antitrypsin deficiency

配列類似性

Belongs to the serpin family.

ドメイン

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.

翻訳後修飾

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.

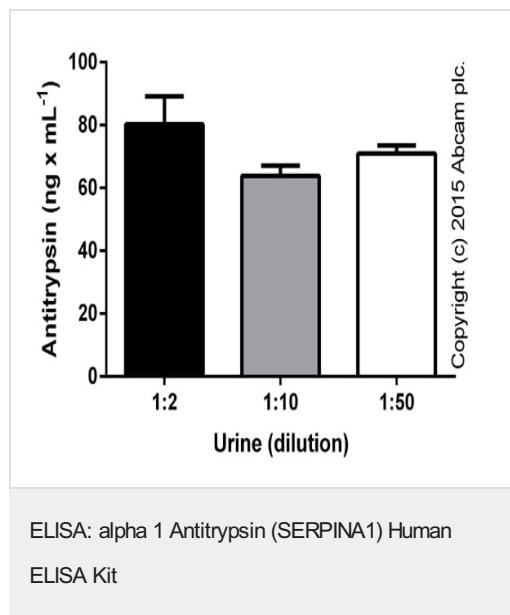
Structure of glycans at Asn-70 and Asn-271 is Hex5HexNAc4. The structure of the antennae is Neu5Ac(alpha1-6)Gal(beta1-4)GlcNAc attached to the core structure Man(alpha1-6)[Man(alpha1-3)]Man(beta1-4)GlcNAc(beta1-4)GlcNAc. Some antennae are fucosylated, which forms a Lewis-X determinant.

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

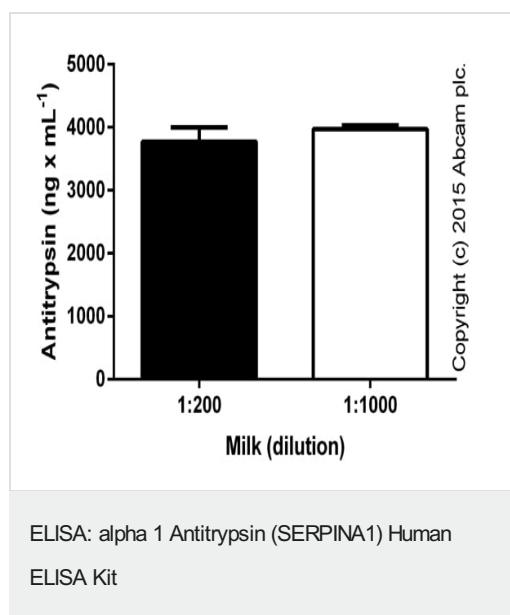
細胞内局在

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.

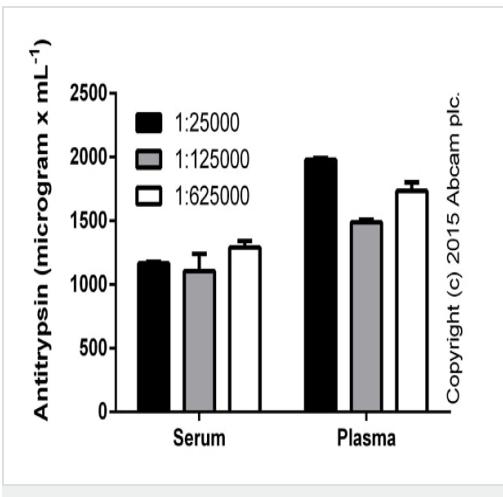
画像



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



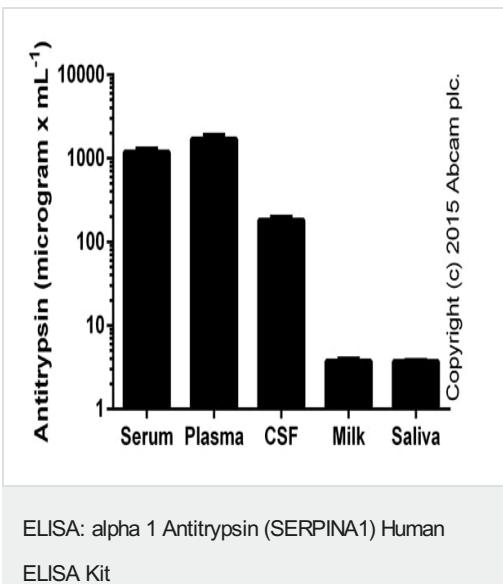
Linearity: alpha 1 antitrypsin in human milk at different dilutions, corrected for the factor of dilution (duplicates +/- SD)



ELISA: alpha 1 Antitrypsin (SERPINA1) Human

ELISA Kit

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

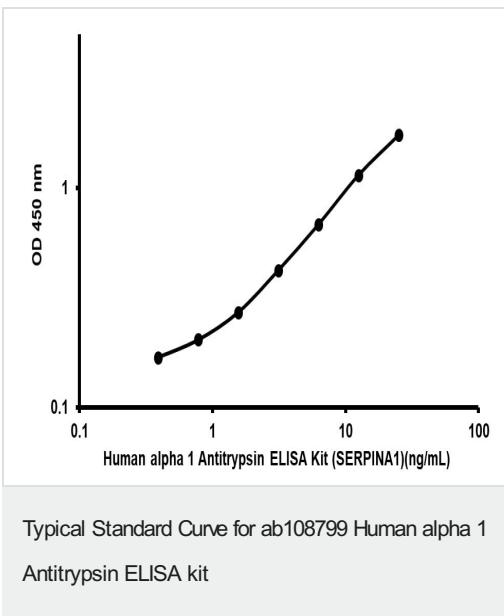


ELISA: alpha 1 Antitrypsin (SERPINA1) Human

ELISA Kit

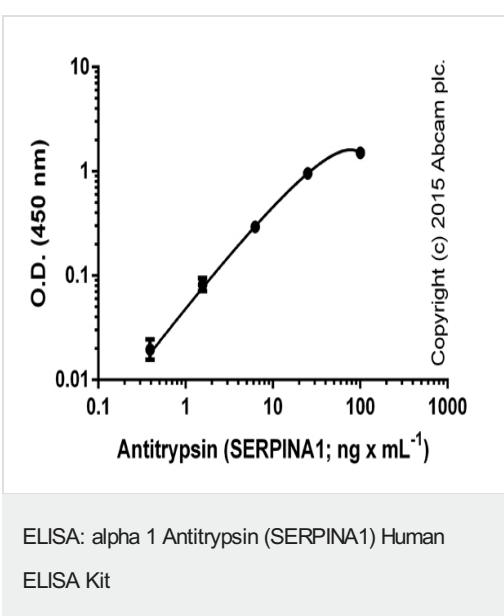
Alpha 1 antitrypsin in human biological fluids (duplicates +/- SD).

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).



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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