

Mouse alpha-1-antitrypsin ELISA Kit ab267809

リコンビナント SimpleStep ELISA

1 References [画像数 4](#)

製品の概要

製品名 Mouse alpha-1-antitrypsin ELISA Kit

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%
Serum	8			3.7%

Inter-Assay (日差再現性)

サンプル	N	平均値	SD	CV%
Serum	4			4.7%

サンプルの種類 Serum, Cell culture media, Hep Plasma, EDTA Plasma, Cit plasma

アッセイタイプ Sandwich (quantitative)

検出感度 65 ng/ml

検出範囲 104.7 ng/ml - 6700 ng/ml

添加回収試験 特定サンプルでの回収試験

サンプルの種類	平均 %	測定範囲
Serum	113	108% - 117%
Cell culture media	90	88% - 93%
Hep Plasma	108	103% - 112%
EDTA Plasma	102	86% - 116%
Cit plasma	111	104% - 118%

全工程の試験時間 1h 30m

ステップ One step assay

種交差性

交差種: Mouse

製品の概要

Mouse alpha-1-antitrypsin ELISA Kit (ab267809) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of alpha-1-antitrypsin protein in cell culture media, edta plasma, hep plasma, serum, and cit plasma. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse alpha-1-antitrypsin with 65 ng/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (**ab203359**) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

特記事項

Mouse Alpha-1-antitrypsin is an 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).

試験プラットフォーム

Pre-coated microplate (12 x 8 well strips)

製品の特性**保存方法**

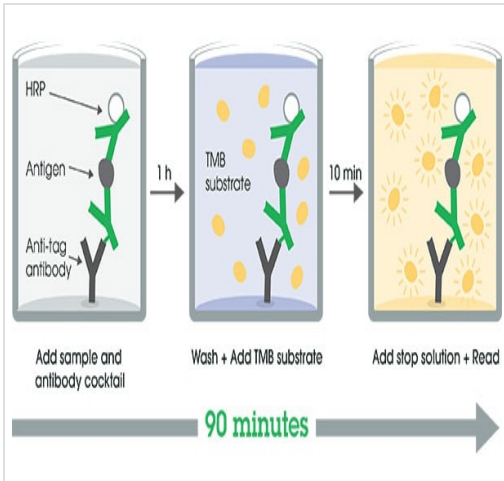
Store at +4°C. Please refer to protocols.

内容	1 x 96 tests
10X Mouse alpha-1-antitrypsin Capture Antibody	1 x 600µl
10X Mouse alpha-1-antitrypsin Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BR	1 x 6ml
Mouse alpha-1-antitrypsin Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml

内容	1 x 96 tests
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

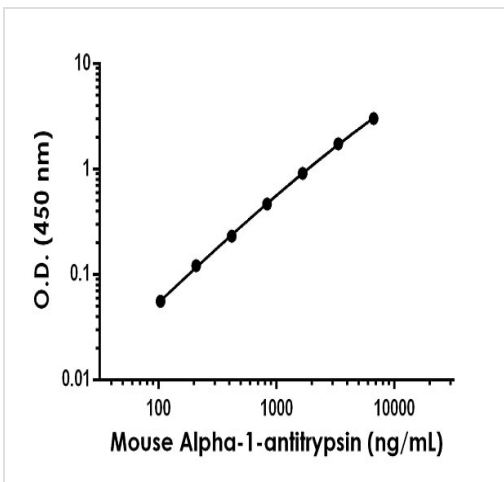
機能	<p>Inhibitor of serine proteases. Its primary target is elastase, but it also has a moderate affinity for plasmin and thrombin. Irreversibly inhibits trypsin, chymotrypsin and plasminogen activator. The aberrant form inhibits insulin-induced NO synthesis in platelets, decreases coagulation time and has proteolytic activity against insulin and plasmin.</p> <p>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).</p>
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	<p>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.</p> <p>Proteolytic processing may yield the truncated form that ranges from Asp-30 to Lys-418.</p>
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



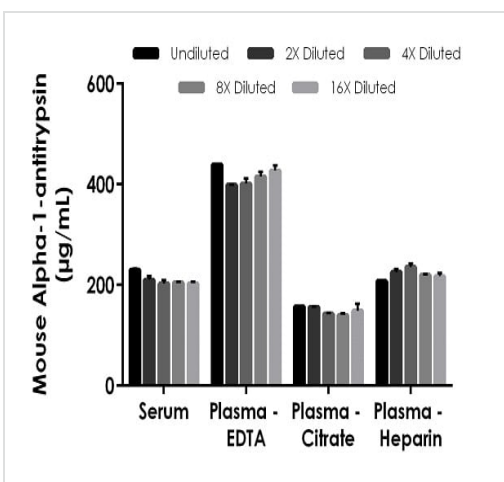
SimpleStep ELISA Protocol Diagram

SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



Example of mouse alpha-1-antitrypsin standard curve in Sample Diluent NS.

The alpha-1-antitrypsin standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



Interpolated concentrations of native alpha-1-antitrypsin in mouse serum, plasma (EDTA), plasma (citrate) and plasma (heparin) samples.

The concentrations of alpha-1-antitrypsin were measured in duplicates, interpolated from the alpha-1-antitrypsin standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 2.5%, plasma (EDTA) 1:133, plasma (citrate), and plasma (heparin) 3%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean alpha-1-antitrypsin concentration was determined to be 210 µg/mL in serum, 416 µg/mL in plasma (EDTA), 149 µg/mL in plasma (citrate), and 221 µg/mL in plasma (heparin).

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Confirmed specificity



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Animal-free production

Sandwich ELISA - Mouse alpha-1-antitrypsin ELISA
Kit (ab267809)

To learn more about the advantages of recombinant antibodies see [here](#).

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