

Human Alpha-1-Antitrypsin (a1AT) ELISA Kit | a1AT elisa kit

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CATALOG #
AAA20692

REACTIVITY
Human

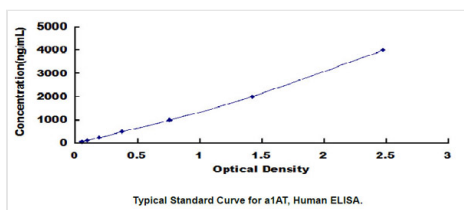
PRODUCT SYNONYMS

Alpha-1-Antitrypsin (a1AT); Human Alpha-1-Antitrypsin (a1AT) ELISA Kit; SERPINA1; SPAAT; A1-AT; PI; Serpin Peptidase Inhibitor; Clade A(Alpha-1 Antiproteinase/AntiTrypsin)Member 1; Alpha-1 protease inhibitor; Short peptide from AAT; Serpin A1; a1AT elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of a1AT. No significant cross-reactivity or interference between a1AT and analogues was observed.
Sequence Length	306
Assay Type	Quantitative Sandwich
Samples	Human serum, plasma, tissue homogenates, cell lysates, cell culture supernates and other biological fluids
Detection Range	6.25-400ng/mL
Sensitivity	< 2.63ng/mL
Intra-assay Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level a1AT were tested 20 times on one plate, respectively. Intra-Assay: CV<10%
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level a1AT were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. Inter-Assay: CV<12%
Preparation and Storage	The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for a1AT elisa kit	Principle of the Assay: The microplate provided in this kit has been pre-coated with an antibody specific to a1AT. Standards or samples are then added to the appropriate microplate wells with a biotin-conjugated antibody specific to a1AT. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain a1AT, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of a1AT in the samples is then determined by comparing the O.D. of the samples to the standard curve. Intended Uses: The kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of a1AT in human serum, plasma, tissue homogenates, cell lysates, cell culture supernates and other biological fluids.
Product Categories/Family for a1AT elisa kit	Enzyme & Kinase; Infection immunity; Hepatology

NCBI AND UNIPROT INFORMATION

NCBI GI #	50363221
NCBI GeneID	5265
NCBI Accession #	NP_001002235.1
NCBI GenBank Nucleotide #	NM_001002235.2
UniProt Accession #	P01009; Q0PVP5; Q13672; Q53XB8; Q5U0M1; Q7M4R2; Q86U18; Q86U19; Q96BF9; Q96ES1; A6PX14; B2RDQ8
Molecular Weight	34,755 Da
NCBI Official Full Name	alpha-1-antitrypsin
NCBI Official Synonym Full Names	serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1
NCBI Official Symbol	SERPINA1
NCBI Official Synonym Symbols	PI; A1A; AAT; PI1; A1AT; PRO2275; alpha1AT
NCBI Protein Information	alpha-1-antitrypsin
UniProt Protein Name	Alpha-1-antitrypsin
UniProt Gene Name	SERPINA1
UniProt Synonym Gene Names	AAT; PI; SPAAT
UniProt Entry Name	A1AT_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/human-elisa-kits/alpha-1-antitrypsin-a1at/20692>