

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

Human Alpha-1-Antitrypsin (a1AT) Mini Samples ELISA Kit

CATALOG # AAA188739	REACTIVITY Human	APPLICATIONS ELISA
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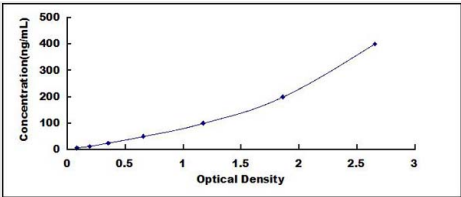
PRODUCT SYNONYMS

Alpha-1-Antitrypsin (a1AT); Human Alpha-1-Antitrypsin (a1AT) Mini Samples ELISA Kit; Alpha-1-Antitrypsin; 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 Mini Samples Alpha-1-Antitrypsin (a1AT). No significant cross-reactivity or interference between Mini Samples Alpha-1-Antitrypsin (a1AT) and analogues was observed.
Sequence Length	418
Assay Type	Double-antibody Sandwich
Samples	Serum, plasma, tissue homogenates, cell lysates, cell culture supernates and other biological fluids
Detection Range	6.25-400ng/mL
Sensitivity	The minimum detectable dose of this kit is typically less than 2.93ng/mL
Applicable Applications for a1AT elisa kit	ELISA
Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level Mini Samples Alpha-1-Antitrypsin (a1AT) were tested 20 times on one plate, respectively. Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Mini Samples Alpha-1-Antitrypsin (a1AT) were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100 Intra-Assay: CV<10% Inter-Assay: CV<12%
Test Principle	The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Mini Samples Alpha-1-Antitrypsin (a1AT). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Mini Samples Alpha-1-Antitrypsin (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 Mini Samples Alpha-1-Antitrypsin (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 Mini Samples Alpha-1-Antitrypsin (a1AT) in the samples is then determined by comparing the O.D. of the samples to the standard curve.
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)

NCBI AND UNIPROT INFORMATION

NCBI GI #	50363221
NCBI GeneID	5265
NCBI Accession #	NP_001002235.1
NCBI GenBank Nucleotide #	NP_001002235.1
UniProt Accession #	P01009
NCBI Official Full Name	alpha-1-antitrypsin
NCBI Official Synonym Full Names	serpin family A member 1
NCBI Official Symbol	SERPINA1
NCBI Official Synonym Symbols	PI; A1A; AAT; PI1; A1AT; nNIF; 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.