

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

Rat Alpha-1-Antitrypsin (a1AT)(Sandwich ELISA) ELISA Kit

CATALOG # AAA189531	REACTIVITY Rat	APPLICATIONS ELISA
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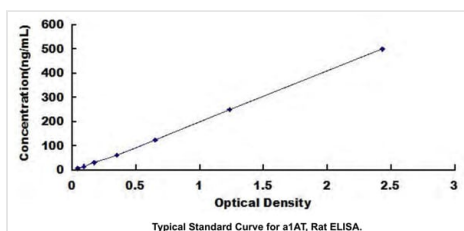
PRODUCT SYNONYMS

Alpha-1-Antitrypsin (a1AT); Rat Alpha-1-Antitrypsin (a1AT)(Sandwich ELISA) ELISA Kit; Mini Samples ELISA Kit for Alpha-1-Antitrypsin (a1AT); a1AT/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	Rat
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.
Assay Type	Quantitative Sandwich
Samples	Rat serum, plasma, tissue homogenates, cell lysates, cell culture supernates and other biological fluids
Detection Range	7.8-500ng/mL
Sensitivity	< 3.0ng/mL
Applicable Applications for a1AT elisa kit	ELISA
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	Store at 4 degree C for 1 month/ -20 degree C for long-term (within shelf life). 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 $\pm$ 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 rat serum, plasma, tissue homogenates, cell lysates, cell culture supernates and other biological fluids.
Product Categories/Family for a1AT elisa kit	Cardiovascular biology; Neuro science

NCBI AND UNIPROT INFORMATION

NCBI GI #	51036655
NCBI GeneID	24648
NCBI Accession #	NP_071964.2
NCBI GenBank Nucleotide #	NM_022519.2
UniProt Accession #	P17475; Q6AYZ5
Molecular Weight	46,136 Da
NCBI Official Full Name	alpha-1-antiproteinase
NCBI Official Synonym Full Names	serpin family A member 1
NCBI Official Symbol	Serpina1
NCBI Official Synonym Symbols	Pi; AAT; Spi1
NCBI Protein Information	alpha-1-antiproteinase
UniProt Protein Name	Alpha-1-antiproteinase
UniProt Gene Name	Serpina1
UniProt Entry Name	A1AT_RAT

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/rat-elisa-kits/alpha-1-antitrypsin-a1at/189531>