

Rat Alpha-1-antitrypsin (SERPINA1) ELISA Kit

Catalog No: #EK7389



Package Size: #EK7389-1 48T #EK7389-2 96T

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

Product Name	Rat Alpha-1-antitrypsin (SERPINA1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (Rattus norvegicus)
Other Names	A1A; A1-AT; AAT; MGC23330; MGC9222; PI; PI1; PRO2275; OTTHUMP00000197150 protease inhibitor 1 (anti-elastase); alpha-1-antitrypsin serine (or cysteine) proteinase inhibitor; clade A; member 1 serine; Serpin Peptidase Inhibitor,Clade A(Alpha-1 Antiproteinase/AntiTrypsin)Member 1
Accession No.	P17475
Uniprot	P17475
GeneID	24648;
Storage	<p>The stability of ELISA 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.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

Application Details

Detect Range:7.81-500 ng/mL

Sensitivity:3.5 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate SERPINA1 in samples. An antibody specific for SERPINA1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySERPINA1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SERPINA1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of SERPINA1 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**alpha1-antitrypsin, an acute phase protein, is the prototypic member of the serpin super family and a major inhibitor of serine proteases. As an acute phase protein, alpha 1-antitrypsin is thought to play an important role in limiting host tissue injury at sites of inflammation.

A1AT is a 52-kDa serpin (serine protease inhibitor), and, in medicine, it is considered the most prominent serpin; the terms alpha 1-antitrypsin and protease inhibitor (Pi) are often used interchangeably.Like all serine protease inhibitors, A1AT has a characteristic secondary structure of beta sheets and alpha helices. Mutations in these areas can lead to non-functional proteins that can polymerise and accumulate in the liver (infantile hepatic cirrhosis).

Note: This product is for in vitro research use only