Human α1-AT Antibody Pair Set

Catalog No. E-KAB-0253 **Applications** ELISA
Synonyms SERPINA1, A1A, A1AT, AAT, PI, PI1, PRO2275

Kit components & Storage

Title	Specifications	Storage
Human α1-AT Capture Antibody	1 vial, 100 μg	Store at -20℃ for one year. Avoid freeze / thaw cycles.
Human α1-AT Detection Antibody (Biotin)	1 vial, 50 μL	Store at -20℃ for one year. Avoid freeze / thaw cycles.

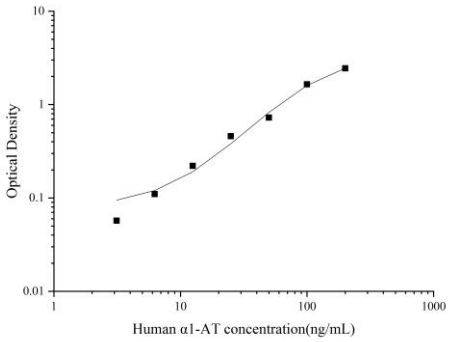
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0253)	
		Human α1-AT Capture Antibody	Human α1-AT Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human α1-AT protein	Recombinant Human α1-AT protein
	Swissprot	P01009	
Product details	Reactivity	Human	Human
	Host	Rabbit	Rabbit
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Protein A	Protein A
	Specificity	Detects Human α1-AT in ELISAs.	

Applications

Human α1-AT Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images
ELISA Capture	0.5-4μg/mL	Human α1-AT Capture Antibody	
ELISA Detection	1:1000-1:10000	Human α1-AT Detection Antibody (Biotin)	

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

SERPINA1 is the gene for a protein called alpha-1-antitrypsin (AAT),which is a serine protease inhibitor whose targets include elastase,plasmin,thrombin,trypsin,chymotrypsin,and plasminogen activator. AAT is a glycoprotein synthesized primarily by hepatocytes,with smaller amountssynthesized by intestinal epithelial cells,neutrophils,pulmonary alveolar cells and macrophages. AAT is the most abundant,endogenous serine protease inhibitor in blood circulation and it has been implicated in regulating vital fluid phase biological events such as blood coagulation,fibrinolysis,complement activation,apoptosis,reproduction,tumor progression and inflammatory response. The primary function of AAT is thought to be the inactivation of neutrophil elastase and other endogenous serine proteases. Defects in SERPINA1 can cause emphysema or liver disease.