

Rabbit anti-Human Serpin A1/Alpha-1-antitrypsin Polyclonal Antibody | anti-SerpinA1 antibody

Anti-Serpin A1/Alpha-1-antitrypsin Antibody, Rabbit Polyclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA259404	Rabbit	Human	Immunoprecipitation, Immunocytochemistry, ELISA, Western Blot

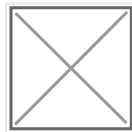
PRODUCT SYNONYMS

Serpin A1/Alpha-1-antitrypsin; Polyclonal Antibody; Anti-Serpin A1/Alpha-1-antitrypsin Antibody; Rabbit Polyclonal; Serpin A1/Alpha-1-antitrypsin Antibody; Rabbit PAb; Antigen Affinity Purified; serpin peptidase inhibitor; clade A (alpha-1 antiproteinase; antitrypsin); member 1; Anti-A1A Antibody; Anti-A1AT Antibody; Anti-AAT Antibody; Anti-alpha-1-antitrypsin Antibody; Anti-alpha1AT Antibody; Anti-nNIF Antibody; Anti-PI Antibody; Anti-PI1 Antibody; Anti-PRO0684 Antibody; Anti-PRO2209 Antibody; Anti-PRO2275 Antibody; Anti-SERPINA1 Antibody; anti-SerpinA1 antibody

PRODUCT SPECIFICATIONS

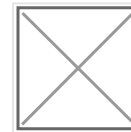
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human Serpin A1/Alpha-1-antitrypsin
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-SerpinA1 antibody	IP (Immunoprecipitation), ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Recombinant Human Serpin A1/Alpha-1-antitrypsin Protein (NP_000286.3; Met1-Lys418). Serpin A1/Alpha-1-antitrypsin specific IgG was purified by Human Serpin A1/Alpha-1-antitrypsin affinity chromatography.
Preparation and Storage	This antibody can be stored at 2 degree C-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles. This antibody is shipped as liquid solution at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

IMAGES



IP (Immunoprecipitation)

SerpinA1 was immunoprecipitated using: Lane A:0.5 mg HepG2 Whole Cell Lysate 4 uL anti-SerpinA1 rabbit polyclonal antibody and 60ug of Immunomagnetic beads Protein A/G. Primary antibody: Anti-SerpinA1 rabbit polyclonal antibody,at 1:100 dilution Secondary antibody: Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 46 kDa Observed band size :55 kDa



IF (Immunofluorescence)

Immunofluorescence staining of SerpinA1-His in HepG2 cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS,blocked with 10% serum, and incubated with rabbit anti-Human SerpinA1-His polyclonal antibody (dilution ratio 1:100) at 4 degree C overnight. Then cells were stained with the Alexa Fluor488-conjugated Goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI (blue).Positive staining was localized to Cytoplasm.



WB (Western Blot)

Anti-SERPINA1 rabbit polyclonal antibody at 1:2000 dilution Lane A: Jurkat Whole Cell Lysate Lysates/proteins at 30ug per lane. Secondary Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution. Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 46 kDa Observed band size: 54 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-SerpinA1 antibody	SerpinA1, also known as Alpha-1 antitrypsin (AAT), is a prototype member of the Serpin superfamily of the serine protease inhibitors. This serine protease inhibitor blocks the protease, neutrophil elastase. Alpha-1 antitrypsin is mainly produced in the liver and acts as an antiprotease. Its principal function is to inactivate neutrophil elastase, preventing tissue damage. SerpinA1 (alpha1-antitrypsin), an acute phase protein and the classical neutrophil elastase inhibitor, is localized within lipid rafts in primary human monocytes in vitro. Its association with monocytes is inhibited by cholesterol depleting/efflux-stimulating agents (nystatin, filipin, MbetaCD (methyl-beta-cyclodextrin) and oxidized low-density lipoprotein (oxLDL) and conversely, enhanced by free cholesterol. Furthermore, SerpinA1/monocyte association per se depletes lipid raft cholesterol as characterized by the activation of extracellular signal-regulated kinase 2, formation of cytosolic lipid droplets, and complete inhibition of oxLDL uptake by monocytes. Previous population studies have suggested that heterozygote status for the AAT gene (SerpinA1) is a risk factor for chronic rhinosinusitis with nasal polyposis (CRSwNP). Alpha-1 antitrypsin deficiency is a recently identified genetic disease that occurs almost as frequently as cystic fibrosis. It is caused by various mutations in the SerpinA1 gene, and has numerous clinical implications. Alpha-1 antitrypsin deficiency is an inherited disease affecting the lung and liver. In the liver, alpha-1 antitrypsin deficiency may manifest as benign neonatal hepatitis syndrome; a small percentage of adults develop liver fibrosis, with progression to cirrhosis and hepatocellular carcinoma. Its most important physiologic functions are the protection of pulmonary tissue from aggressive proteolytic enzymes and regulation of pulmonary immune processes.
References	Khnlai. T. e. al. (2008. Alpha-. antitrypsi. deficiency. pathogenesis. clinica. presentation. diagnosis. an. treatment. A. . Med. 121(1). 3-9. Camelie. AA. e. al. (2008. Alpha-. antitrypsi. deficiency. diagnosi. an. treatment. . Bra. Pneumol. 34(7). 514-27. Subramaniya. D. e. al. (2010. Cholestero. ric. lipi. raf. microdomain. ar. gatewa. fo. acut. phas. protein. SERPINA1. In. . Bioche. Cel. Biol. 42(9). 1562-70. Kilt. SJ. e. al. (2010. Polymorphism. i. th. SERPINA. (Alpha-1-Antitrypsin. gen. ar. associate. wit. sever. chroni. rhinosinusi. unresponsiv. t. medica. therapy. A. . Rhino. Allergy. 24(1). e4-9.

NCBI AND UNIPROT INFORMATION

NCBI GI #	50363217
NCBI GeneID	5265
NCBI Accession #	NP_000286.3
NCBI GenBank Nucleotide #	NM_000295.4
UniProt Accession #	P01009; Q0PVP5; Q13672; Q53XB8; Q5U0M1; Q7M4R2; Q86U18; Q86U19; Q96BF9; Q96ES1; A6PX14; B2RDQ8
Molecular Weight	52,000
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; serpin A1; alpha-1-antiproteinase; alpha-1-antitrypsin null; alpha-1 protease inhibitor; protease inhibitor 1 (anti-elastase), alpha-1-antitrypsin; serine (or cysteine) proteinase inhibitor, clade A, member 1
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/polyclonal/serpin-a1-alpha-1-antitrypsin-antibody-immunoprecipitation-immunocytochemistry-western-blot-elisa/259404>