

Anti-SERPINA1 Picoband Antibody

Catalog # ABO11715

Specification

Anti-SERPINA1 Picoband Antibody - Product Information

Application	WB
Primary Accession	<u>P01009</u>
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	
Rabbit IgG polyclonal antibody for Alpha-1-antitrypsin(SERPINA1) detection. Tested with WB in	
Human;Rat.	

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SERPINA1 Picoband Antibody - Additional Information

Gene ID 5265

Other Names Alpha-1-antitrypsin, Alpha-1 protease inhibitor, Alpha-1-antiproteinase, Serpin A1, Short peptide from AAT, SPAAT, SERPINA1, AAT, PI

Calculated MW 46737 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Rat

Subcellular Localization Secreted. Endoplasmic reticulum. The S and Z allele are not secreted effectively and accumulate intracellularly in the endoplasmic reticulum.

Tissue Specificity Ubiquitous. Expressed in leukocytes and plasma. .

Protein Name Alpha-1-antitrypsin

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E. coli-derived human SERPINA1 recombinant protein (Position: E25-T204). Human SERPINA1 shares 72.8% amino acid (aa) sequence identity with rat SERPINA1.



Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-SERPINA1 Picoband Antibody - Protein Information

Name SERPINA1 (<u>HGNC:8941</u>)

Synonyms AAT, Pl

Function

Inhibitor of serine proteases. Its primary target is elastase, but it also has a moderate affinity for plasmin and thrombin. Irreversibly inhibits trypsin, chymotrypsin and plasminogen activator. The aberrant form inhibits insulin-induced NO synthesis in platelets, decreases coagulation time and has proteolytic activity against insulin and plasmin.

Cellular Location

Secreted. Endoplasmic reticulum. Note=The S and Z allele are not secreted effectively and accumulate intracellularly in the endoplasmic reticulum

Tissue Location Ubiquitous. Expressed in leukocytes and plasma.

Anti-SERPINA1 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-SERPINA1 Picoband Antibody - Images



130KD-100KD-70KD-55KD-35KD-25KD-15KD-

Western blot analysis of SERPINA1 expression in rat brain extract (lane 1) and HELA whole cell lysates (lane 2). SERPINA1 at 52KD was detected using rabbit anti- SERPINA1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11715) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-SERPINA1 Picoband Antibody - Background

SERPINA1 is also known as PI, A1A or AAT. This gene is mapped to 14q32.1. The protein encoded by this gene is secreted and is a serine protease inhibitor whose targets include elastase, plasmin, thrombin, trypsin, chymotrypsin, and plasminogen activator. Defects in this gene can cause emphysema or liver disease. Several transcript variants encoding the same protein have been found for this gene.