For Research Use Only

Alpha-1-antitrypsin Polyclonal antibody

Catalog Number: 25876-1-AP



Purification Method:

WB 1:1000-1:6000

IHC 1:400-1:1600

protein lysate

Antigen affinity purification

IP 0.5-4.0 ug for 1.0-3.0 mg of total

Recommended Dilutions:

Basic Information

Catalog Number: 25876-1-AP Size: 1100 ug/ml

UNIPROT ID: Source: Rabbit P01009 Isotype:

Immunogen Catalog Number:

AG22631

GenBank Accession Number:

BC011991 GeneID (NCBI): 5265

Full Name:

serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 1

Observed MW: 47-50 kDa

Applications

Tested Applications: WB, IHC, IP, ELISA Species Specificity:

human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: human saliva, human urine

IP: human plasma,

IHC: mouse placenta tissue.

Background Information

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.

Storage

Storage:

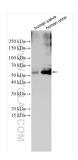
Store at -20°C. Stable for one year after shipment.

Storage Buffer

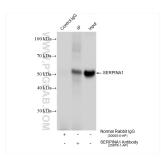
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

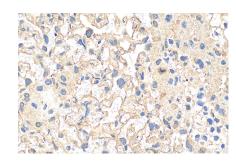
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 25876-1-AP (Alpha-1-antitrypsin antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



IP result of anti-Alpha-1-antitrypsin (IP:25876-1-AP, 4ug; Detection:25876-1-AP 1:3000) with human plasma lysate 1600 ug.



Immunohistochemical analysis of paraffinembedded mouse placenta tissue slide using 25876-1-AP (Alpha-1-antitrypsin antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).