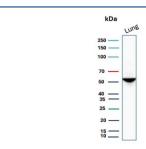


Alpha 1 Antitrypsin Antibody (Hepatocyte Marker) [clone AAT/1379] (V3222)

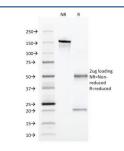
Catalog No.	Formulation	Size
V3222-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3222-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3222SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

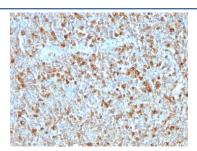
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	AAT/1379
Purity	Protein G affinity
UniProt	P01009
Localization	Cytoplasmic
Applications	Western Blot : 2-4ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Alpha 1 Antitrypsin antibody is available for research use only.



Western blot testing of human lung tissue lysate with Alpha 1 Antitrypsin antibody. Expected molecular weight: 47-52 kDa depending on the level of glycosylation.



SDS-PAGE Analysis of Purified, BSA-Free Alpha 1 Antitrypsin Antibody (clone AAT/1379). Confirmation of Integrity and Purity of the Antibody.



IHC testing of FFPE human tonsil with Alpha 1 Antitrypsin antibody (clone AAT/1379). Required HIER: steam sections in pH6, 10mM citrate buffer for 10-20 min.

Description

Alpha-1 Antitrypsin or α1-antitrypsin (A1AT) is a protease inhibitor belonging to the serpin superfamily. It is generally known as serum trypsin inhibitor. Alpha 1-antitrypsin is also referred to as alpha-1 proteinase inhibitor (A1PI) because it inhibits a wide variety of proteases. It protects tissues from enzymes of inflammatory cells, especially neutrophil elastase, and has a reference range in blood of 1.5 - 3.5 gram/liter (in US the reference range is generally expressed as mg/dL or micromoles), but the concentration can rise manyfold upon acute inflammation. In its absence (such as in alpha 1-antitrypsin deficiency), neutrophil elastase is free to break down elastin, which contributes to the elasticity of the lungs, resulting in respiratory complications such as emphysema, or COPD (chronic obstructive pulmonary disease) in adults and cirrhosis in adults or children.

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). [Wiki]

Application Notes

Titration of the Alpha 1 Antitrypsin antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A human partial recombinant protein was used as the immunogen for this Alpha 1 Antitrypsin antibody.

Storage

Store the Alpha 1 Antitrypsin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).