

SERPINA1-1

Uniprot ID: P01009

Protein name: A1AT_HUMAN

Full name: Alpha-1-antitrypsin

Protein existence: evidence at protein level

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.

One antibody SERPINA1-1 was tested and selected for full protein profiling.

SERPINA1-1 (CAB073396)

OK

Immunohistochemistry

IHC protocol: HIER pH 6, Dilution 1:18000

IHC test staining: Stains plasma/extra cellular fluids in several tissues.

IHC Annotators comments

A majority of tissues displayed weak to moderate cytoplasmic positivity. Hematopoietic cells, endothelial cells and trophoblastic cells showed strong cytoplasmic and nuclear immunoreactivity. Remaining tissues were negative.

Most cancers showed weak to moderate cytoplasmic positivity. Gliomas and lymphomas were negative.

Immunofluorescence

IF Overlay: antibody (green), anti-tubuline (red) and DAPI (blue)

IF Localization: Negative IF staining in all tested cell lines

IF Validation: The subcellular location is not supported by literature

Western blot

WB Size markers (kDa): 250, 130, 95, 72, 55, 36, 28, 17, 10

WB Lanes: Marker(1), RT-4(2), U251 MG(3), Plasma(4), Liver(5), Tonsil(6)

WB Target weight (kDa): 46.7, 40.3, 17.1, 15.7, 12.7, 11.8, 9.9, 2.2

WB Validation: Supportive (Band of predicted size in kDa (+/-20%) with additional bands present)

