

ATIII (H-70): sc-32887

BACKGROUND

The serine proteinase inhibitors (serpins) compose a superfamily of proteins with a diverse set of functions, including the control of blood coagulation, complement activation, programmed cell death and development. Serpins are secreted glycoproteins that contain a stretch of peptide that mimics a true substrate for a corresponding serine protease. Antithrombin-III (ATIII), an extracellular plasma protein, is a crucial serine protease inhibitor that regulates the coagulation cascade in blood. The inhibitory activity of ATIII is amplified in the presence of heparin. ATIII inhibits Thrombin and factors IXa, Xa and XIa. Defects in the gene SerpinC1, which encodes for ATIII, can cause ATIII (antithrombin III) deficiency, an autosomal dominant disease which is a risk factor for hereditary thrombophilia.

REFERENCES

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- SWISS-PROT/TrEMBL (P01008). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

CHROMOSOMAL LOCATION

Genetic locus: SERPINC1 (human) mapping to 1q25.1; SerpinC1 (mouse) mapping to 1 H2.1.

SOURCE

ATIII (H-70) is a rabbit polyclonal antibody raised against amino acids 331-400 mapping near the C-terminus of ATIII of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ATIII (H-70) is recommended for detection of ATIII of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

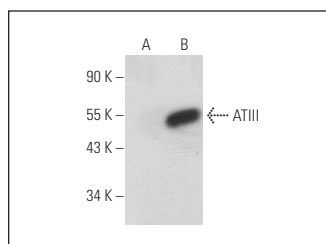
ATIII (H-70) is also recommended for detection of ATIII in additional species, including equine and bovine.

Suitable for use as control antibody for ATIII siRNA (h): sc-44839, ATIII siRNA (m): sc-44840, ATIII shRNA Plasmid (h): sc-44839-SH, ATIII shRNA Plasmid (m): sc-44840-SH, ATIII shRNA (h) Lentiviral Particles: sc-44839-V and ATIII shRNA (m) Lentiviral Particles: sc-44840-V.

Molecular Weight of ATIII: 55 kDa.

Positive Controls: ATIII (m): 293T Lysate: sc-118611, HeLa whole cell lysate: sc-2200 or NIH/3T3 whole cell lysate: sc-2210.

DATA



ATIII (H-70): sc-32887. Western blot analysis of ATIII expression in non-transfected: sc-117752 (A) and mouse ATIII transfected: sc-118611 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **ATIII (H-7): sc-271987** or **ATIII (A-6): sc-393867**, our highly recommended monoclonal alternatives to ATIII (H-70).