

SERPINC1 Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AM2053b

Product Information

Application WB, E **Primary Accession** P01008 Other Accession NP 000479.1 Reactivity Human, Rat Host Mouse Clonality Monoclonal Isotype IgG1 **Clone Names** 435CT4.7.4 **Calculated MW** 52602 364-393 **Antigen Region**

Additional Information

Gene ID 462

Other Names Antithrombin-III, ATIII, Serpin C1, SERPINC1, AT3

Target/Specificity This SERPINC1 antibody is generated from mice immunized with a KLH

conjugated synthetic peptide between 364-393 amino acids from human

SERPINC1.

Dilution WB~~1:500~1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions SERPINC1 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name SERPINC1

Synonyms AT3

Function Most important serine protease inhibitor in plasma that regulates the blood

coagulation cascade (PubMed:<u>15140129</u>, PubMed:<u>15853774</u>). AT-III inhibits

thrombin, matriptase-3/TMPRSS7, as well as factors IXa, Xa and XIa (PubMed:<u>15140129</u>). Its inhibitory activity is greatly enhanced in the presence of heparin.

Cellular Location Secreted, extracellular space.

Tissue Location Found in plasma.

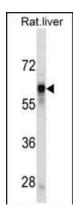
Background

The protein encoded by this gene is a plasma protease inhibitor and a member of the serpin superfamily. This protein inhibits thrombin as well as other activated serine proteases of the coagulation system, and it regulates the blood coagulation cascade. The protein includes two functional domains: the heparin binding-domain at the N-terminus of the mature protein, and the reactive site domain at the C-terminus. The inhibitory activity is enhanced by the presence of heparin. More than 120 mutations have been identified for this gene, many of which are known to cause antithrombin-III deficiency.

References

Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010): Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Zhang, G.S., et al. Blood Coagul. Fibrinolysis 21(6):588-591(2010) Bunkenborg, J., et al. Proteomics 4(2):454-465(2004) Picard, V., et al. Biochemistry 34(26):8433-8440(1995)

Images



SERPINC1 Antibody (Cat. #AM2053b) western blot analysis in rat liver tissue lysates (35µg/lane). This demonstrates the SERPINC1 antibody detected the SERPINC1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.