

**Antithrombin III Antibody**  
**Purified Rabbit Polyclonal Antibody**  
**Catalog # ABV11652****Specification**

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**Antithrombin III Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P01008</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	rabbit IgG
Calculated MW	52602

**Antithrombin III Antibody - Additional Information****Gene ID** 462**Other Names**  
SERPINC1**Target/Specificity**  
Antithrombin III**Formulation**  
100 µg (0.5 mg/ml) of antibody in PBS pH 7.2, 0.01 % BSA, 0.03 % ProClin®, and 50 % glycerol.**Handling**  
The antibody solution should be gently mixed before use.**Background Descriptions****Precautions**  
Antithrombin III Antibody is for research use only and not for use in diagnostic or therapeutic procedures.**Antithrombin III Antibody - Protein Information****Name** SERPINC1**Synonyms** AT3**Function**  
Most important serine protease inhibitor in plasma that regulates the blood coagulation cascade (PubMed: [15853774](http://www.uniprot.org/citations/15853774)), PubMed: [15140129](http://www.uniprot.org/citations/15140129)). AT-III inhibits thrombin, matriptase-3/TMPRSS7, as well as factors IXa, Xa and XIa (PubMed: [15853774](#)).

href="http://www.uniprot.org/citations/15140129" target="\_blank">15140129</a>). Its inhibitory activity is greatly enhanced in the presence of heparin.

**Cellular Location**

Secreted, extracellular space.

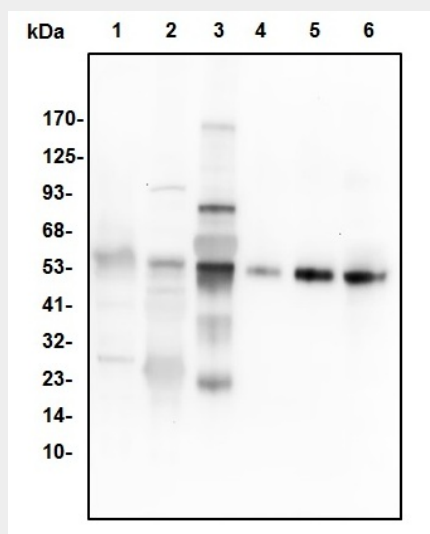
**Tissue Location**

Found in plasma.

**Antithrombin III Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Antithrombin III Antibody - Images**

Western blot with human anti-thrombin III antibody: lane1: R.kidney lysate 60ug; lane2: M.muscle lysate 66ug; lane3: human serum 5.2ug; lane4: Human antithrombin III 2ng; lane5: Human antithrombin III 10ng; lane6: Human antithrombin III 50ng.

**Antithrombin III Antibody - Background**

SerpinC1, also known as antithrombin III (AT III), is a member of the serpin superfamily of serine protease inhibitors, and has been found to be a marker for disseminated intravascular coagulation (DIC) and to be of prognostic significance in septic patients. SerpinC1 synthesized in the liver is the principal plasma serpin of blood coagulation proteases and inhibits thrombin and other factors such as Xa by the formation of covalently linked complexes. Thus it is one of the most important coagulation inhibitors and the fundamental enzyme for the therapeutic action of heparin. In common with SerpinA5 and D1, the inhibitory activity of SerpinC1 undergoes a dramatic increase in

the presence of heparin and other glycosaminoglycans. ATIII mediates the promotion of prostaglandin release, an inhibitor of leucocyte activation and downregulator of many proinflammatory cytokines. Antithrombin III exerts anti-inflammatory properties in addition to its anti-coagulative mechanisms. In animal models of sepsis, ATIII affected cytokine plasma concentrations with a decrease of pro-inflammatory cytokines. The deficiency or functional abnormality of ATIII may result in an increased risk of thromboembolic disease, such as deep vein thrombosis and pulmonary embolism. In addition, it has been reported that SerpinC1 can alter or influence inflammatory processes via inhibition of NF- $\kappa$ B activation or actin polymerization. Antithrombin III is found in normal serum at 15 mg per 100 ml. Found at higher levels in plasma than in serum because of complexing with thrombin during coagulation. Clinically, reduced levels are indicative of hypercoagulability.