


Product datasheet

Anti-Antithrombin III/ATIII antibody ab231005

6 Images

Overview

<b>Product name</b>	Anti-Antithrombin III/ATIII antibody
<b>Description</b>	Rabbit polyclonal to Antithrombin III/ATIII
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Rat <b>Predicted to work with:</b> Mouse 
<b>Immunogen</b>	Recombinant full length protein (His-tag) corresponding to Rat Antithrombin III/ATIII aa 33-465. (Expressed in E.coli). Sequence: HGNPVDDICIAKPRDIPVNP MCIYRSPAKKATEEDVLEQKV PEATNRRVW ELSKANSRFATNFYQHLADSKNDNDNIFLSPLSISTAFAMT KLGACNNTL KQLMEVFKFDTISEKTSDQIHFFFAKLNCRLYRKANKSSNL VSANRLFGD KSLTFNESYQDVSEIVYGAKLQPLDFKENPEQSRVTINNW VANKTEGRIK DVIPQGAIDELTALVLVNTIYFKGLWWSKFSPEPTRKEPFH KVDGQSCLV PMMYQEGKFKYRRVGEGTQVLEMPFKGDDITMVLILPKPE KSLAKVEQEL TPELLQEWLDELSEVMLVVHVPRFRIEDSFSLKEQLQDM GLVDLFSPEKS QLPGIIAEGRDDLFVSDAFHKAFLEVNEEGSEAAASTSVVI TGRSLNPSR VTFKANRPFLVLIREVALNTIIFMGRVSNPCVN  <a href="#">Run BLAST with</a> <a href="#">Run BLAST with</a>
<b>Positive control</b>	IHC-P: Rat liver, kidney, small intestine and heart tissues. WB: Native rat Antithrombin III/ATIII protein ( <a href="#">ab93317</a> ), Rat serum; Rat heart and liver lysates; Recombinant rat Antithrombin III/ATIII protein.
<b>General notes</b>	Previously labelled as Antithrombin III.  Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

## Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab231005 was purified by antigen-specific affinity chromatography followed by Protein A affinity chromatography.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab231005** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 5 - 20 µg/ml.
WB		Use a concentration of 0.5 - 5 µg/ml. Predicted molecular weight: 52 kDa.

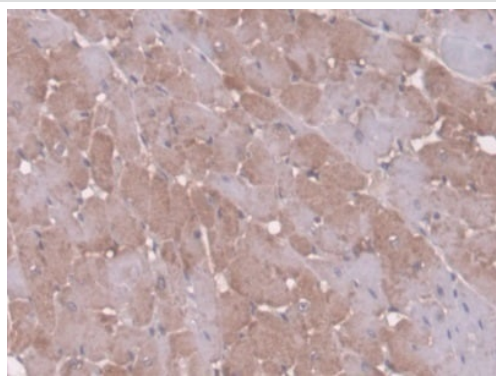
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## Target

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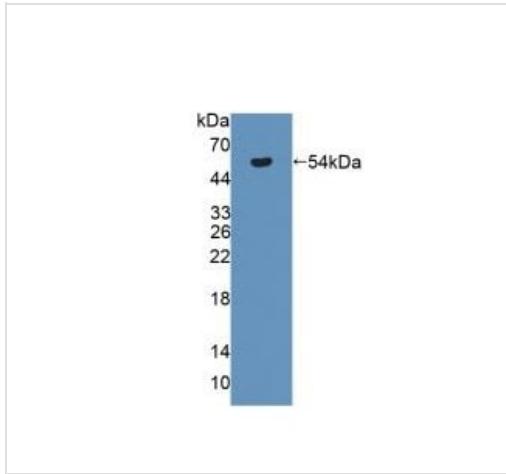
<b>Function</b>	Most important serine protease inhibitor in plasma that regulates the blood coagulation cascade. AT-III inhibits thrombin as well as factors IXa, Xa and XIa. Its inhibitory activity is greatly enhanced in the presence of heparin.
<b>Tissue specificity</b>	Found in plasma.
<b>Involvement in disease</b>	Defects in SERPINC1 are the cause of antithrombin III deficiency (AT3D) [MIM:613118]. AT3D is an important risk factor for hereditary thrombophilia, a hemostatic disorder characterized by a tendency to recurrent thrombosis. AT3D is classified into 4 types. Type I: characterized by a 50% decrease in antigenic and functional levels. Type II: has defects affecting the thrombin-binding domain. Type III: alteration of the heparin-binding domain. Plasma AT-III antigen levels are normal in type II and III. Type IV: consists of miscellaneous group of unclassifiable mutations.
<b>Sequence similarities</b>	Belongs to the serpin family.
<b>Post-translational modifications</b>	Phosphorylation sites are present in the extracellular medium.
<b>Cellular localization</b>	Secreted > extracellular space.

## Images



Paraffin-embedded rat heart tissue stained for Antithrombin III / ATIII using ab231005 at 20 µg/ml in immunohistochemical analysis, followed by DAB staining.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Antithrombin III/ATIII antibody (ab231005)



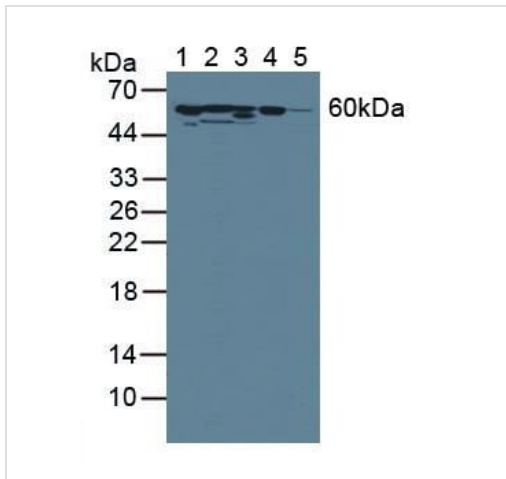
Western blot - Anti-Antithrombin III/ATIII antibody (ab231005)

Anti-Antithrombin III/ATIII antibody (ab231005) at 2 µg/ml +  
Recombinant rat Antithrombin III / ATIII protein

**Secondary**

HRP-Linked Guinea pig Anti-Rabbit at 1/2000 dilution

**Predicted band size:** 52 kDa



Western blot - Anti-Antithrombin III/ATIII antibody (ab231005)

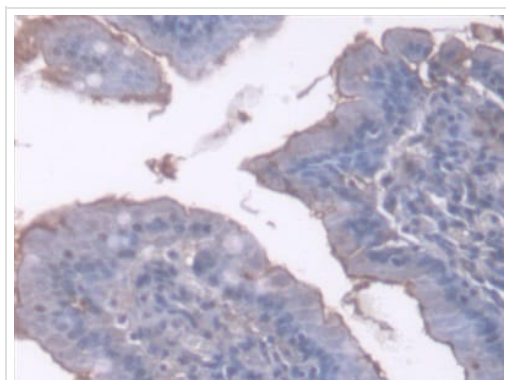
**All lanes :** Anti-Antithrombin III/ATIII antibody (ab231005) at 2 µg/ml

- Lane 1 :** Rat serum
- Lane 2 :** Rat heart lysate
- Lane 3 :** Rat liver lysate
- Lane 4 :** Rat lung lysate
- Lane 5 :** Rat brain lysate

**Secondary**

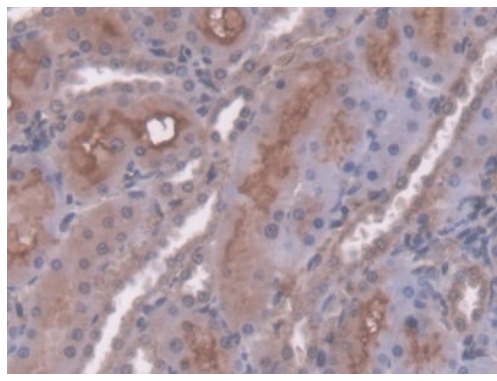
**All lanes :** HRP-Linked Guinea pig Anti-Rabbit at 1/2000 dilution

**Predicted band size:** 52 kDa



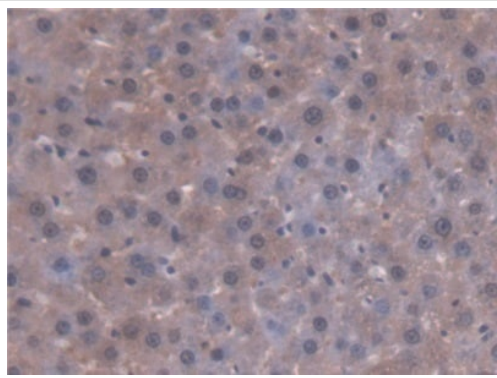
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Antithrombin III/ATIII antibody (ab231005)

Paraffin-embedded rat small intestine tissue stained for Antithrombin III / ATIII using ab231005 at 20 µg/ml in immunohistochemical analysis, followed by DAB staining.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Antithrombin III/ATIII antibody (ab231005)

Paraffin-embedded rat kidney tissue stained for Antithrombin III / ATIII using ab231005 at 20 µg/ml in immunohistochemical analysis, followed by DAB staining.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Antithrombin III/ATIII antibody (ab231005)

Paraffin-embedded rat liver tissue stained for Antithrombin III / ATIII using ab231005 at 20 µg/ml in immunohistochemical analysis, followed by DAB staining.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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