**Representative Datasheet**

**Sheep anti-rabbit Antithrombin (ATIII)**
Affinity-Purified IgG

0.5 mg

**Product #:** SARAT-AP  
**Lot #::** XXXX  
**Expiry date:** XXXX

Store at -10 to -20°C.

For Research Use Only.  
Not for use in diagnostic procedures.

**Description of Antithrombin (ATIII)**

Antithrombin, also known as Antithrombin III (ATIII), is a member of the SERPIN family of proteinase inhibitors and the primary inhibitor of thrombin in plasma. Human ATIII is produced in the liver and circulates in plasma at around 200 μg/ml (~3.5 μM). Antithrombin inhibits a broad spectrum of serine proteases including thrombin, activated forms of factor X, factor IX, factor XI, factor XII, as well as kallikrein, plasmin and urokinase. Enzyme inhibition by antithrombin occurs through proteolytic cleavage at Arg385-Ser386 and subsequent rapid formation of a stable, inactive 1:1 enzyme-antithrombin complex. Heparin has a profound accelerating effect on the inhibitory activity of antithrombin towards some enzymes. For example, the rate of inhibition of thrombin and activated factor X is increased 1000-fold in the presence of optimal concentrations of heparin, whereas heparin has relatively little effect on the inhibition rate of activated factor XI, activated factor XII and kallikrein. Antithrombin is a single chain molecule with a molecular weight of 59 kDa. Interaction with thrombin results in an SDS-stable thrombin-antithrombin complex of 96 kDa.1-3

**REFERENCES and REVIEWS**


**Product Specifications**

**Description:**
Vial containing XXXX ml of IgG purified by affinity-chromatography on immobilized ATIII. Total protein is 0.5 mg.

**Format:**
Affinity-purified IgG (APIgG), clear liquid.

**Host Animal:**
Sheep

**Immunogen:**
Rabbit antithrombin purified from plasma.

**Concentration:**
APIgG concentration is XXXX mg/ml, determined by absorbance using an extinction coefficient (E19280) of 13.4.

**Buffer:**
10 mM HEPES, pH 7.4, 150 mM NaCl, 50% (v/v) glycerol.

**Storage:**
Store between -10 and -20°C. Product will become viscous but will not freeze. Avoid storage in frost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature and gently mix before use.

**Specificity:**
This antibody is specific for rabbit antithrombin as demonstrated by immunoelectrophoresis and ELISA.

**Applications:**
Suitable as a source of enriched antibodies to rabbit antithrombin.

**Neutralizing activity:**
Not determined

**Species Cross Reactivity:** (Immunodiffusion vs. citrated plasma)

<table>
<thead>
<tr>
<th>Species</th>
<th>Cross Reactivity</th>
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<tbody>
<tr>
<td>Human</td>
<td>XXXX</td>
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<tr>
<td>Mouse</td>
<td>XXXX</td>
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<td>Rat</td>
<td>XXXX</td>
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<tr>
<td>Pig</td>
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<tr>
<td>Dog</td>
<td>XXXX</td>
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**Related Products:**

- Cat #: SARAT-IG  Sheep anti-rabbit ATIII, whole IgG from antiseraum
- Cat #: SARAT-HRP Sheep anti-rabbit ATIII, peroxidase labelled IgG
- Cat #: GAAT-IG  Goat anti-human ATIII, whole IgG from antiseraum
- Cat #: GAAT-AP  Goat anti-human ATIII, affinity-purified IgG
- Cat #: SAAT-IG  Sheep anti-human ATIII, whole IgG from antiseraum
- Cat #: SAAT-AP  Sheep anti-human ATIII, affinity-purified IgG
- Cat #: SAAT-APHRP Sheep anti-human ATIII, peroxidase labelled APIgG
- Cat #: ATIII-EIA Paired antibody set for ELISA of human ATIII, 5 x 96 wells
- Cat #: ATII-EIA Paired antibody set for ELISA of human Thrombin-ATIII complex
- Cat #: ATNII10  Paired antibody set for ATIII neutralization in human plasma
- Cat #: ATII-DP  Human plasma deficient in ATIII, immune depleted
- Cat #: ATHC-DP  Human ATIII & HCII def plasma, immune depleted

Visit our site (www.affinitybiologicals.com) for details.

**Limited Warranty:**
This product is warranted to perform in accordance with its labeling and literature. Affinity Biologicals Inc. disclaims any implied warranty of merchantability or fitness for any other purposes, and in no event will Affinity Biologicals Inc. be liable for any consequential damages arising out of aforesaid express warranty.

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