

Product datasheet

Native Human Antithrombin III/ATIII protein ab95077

Description

Product name	Native Human Antithrombin III/ATIII protein
Purity	> 95 % SDS-PAGE.
Expression system	Native
Protein length	Full length protein
Animal free	No
Nature	Native
Species	Human

Specifications

Our **Abpromise guarantee** covers the use of **ab95077** in the following tested applications.

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

Applications	Purification SDS-PAGE
Form	Liquid
Additional notes	2ml of 1:1 slurry 1.0 mg/ml coupled May be used repeatedly. Protocol for purifying high affinity heparin with immobilized antithrombin: 1. Equilibrate immobilized antithrombin in TBS (0.1M Tris-HCl, 0.15M NaCl, pH 7.4) or PBS (0.05M Sodium Phosphate, 0.15M NaCl, pH 7.4). 2. Apply heparin in TBS or PBS. Binding capacity is ~0.1 mg high affinity heparin / ml resin and must be determined by the end user. 3. Wash and elute heparin with 3M NaCl in TBS or PBS. 4. Re-equilibrate resin in TBS or PBS. 5. Add 0.02percent Sodium Azide for storage. Previously labelled as Antithrombin III.

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C. pH: 7.40
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Preservative: 0.02% Sodium azide
Constituents: 1.58% Tris HCl, 0.87% Sodium chloride

General Info

Function	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.
Tissue specificity	Found in plasma.
Involvement in disease	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.
Sequence similarities	Belongs to the serpin family.
Post-translational modifications	Phosphorylation sites are present in the extracellular medium.
Cellular localization	Secreted > extracellular space.

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

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