

Product datasheet for BA1114

SERPINC1 / Antithrombin-III Human Protein

Product data:

Product Type:	Native Proteins
Description:	SERPINC1 / Antithrombin-III human protein, 0.1 mg
Species:	Human
Protein Source:	Plasma
Concentration:	lot specific
Buffer:	Presentation State: Purified State: Lyophilized purified fraction (>95% pure by SDS-PAGE). Buffer System: 50 mM Tris-HCl, pH 8.0 containing 150 mM Sodium Chloride without preservatives
Reconstitution Method:	Restore with 917 µl distilled water.
Preparation:	Lyophilized purified fraction (>95 % pure by SDS-PAGE).
Protein Description:	Human Plasma Antithrombin III. Antithrombin III is found in normal serum at 15 mg/100 ml. Found at higher levels in plasma than in serum because of complexing with thrombin during coagulation. Functions in the inhibition of the proteolytic enzymes involved in blood coagulation and fibrinolysis, including factor Xa, plasmin, thrombin, and trypsin. Potency is strongly enhanced by heparin.
Note:	Caution: All human source materials have tested negative for HIV1, HIV2, HCV and HBc antibodies and HBsAg. No test guarantees a product to be non-infectious. Therefore, all material derived from human fluids or tissues should be considered as potentially infectious.
Storage:	Store the antigen at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_000479
Locus ID:	462
Cytogenetics:	1q25.1
Synonyms:	AT3; AT3D; ATIII; ATIII-R2; ATIII-T1; ATIII-T2; THPH7



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Summary:

The protein encoded by this gene, antithrombin III, 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. Numerous mutations have been identified for this gene, many of which are known to cause antithrombin-III deficiency which constitutes a strong risk factor for thrombosis. A reduction in the serum level of this protein is associated with severe cases of Coronavirus Disease 19 (COVID-19). [provided by RefSeq, Sep 2020]

Protein Families:

Druggable Genome, Secreted Protein

Protein Pathways:

Complement and coagulation cascades