Antithrombin (Human) 1.00 mg

Ref#: HAT Lot#: xxxxxx Exp. Date: xxxx-xx

Store at +2 to +8°C

For Research Use Only Not for Use in Diagnostic Procedures For *in vitro* use only



Description:	Antithrombin (Human)
Format:	Lyophilized in 20 mM Tris-HCl / 0.15 M NaCl / 0.1M sodium citrate / pH 8.3
Host:	Human
Storage:	Store between +2 and +8°C After reconstitution aliquot and freeze at ≤-60°C
Reconstitution:	We recommend hydrating the protein with sterile water to the original volume
Volume:	1 vial containing 0.450 mL
Total Protein:	1.00 mg
Concentration:	2.22 mg/mL before lyophilisation by Absorbance; Extinction Coefficient E ¹ % ₂₈₀ = 6.5
Activity:	7.58 IU/mg
Molecular weight:	58,000 daltons

Human Antithrombin, also known as Antithrombin III (ATIII), is a proteinase inhibitor synthesized in the liver and composed of a single polypeptide chain. 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. Antithrombin concentration in human plasma is about $200 \,\mu\text{g/mL}$ ($3.5 \,\mu\text{M}$).

The human Antithrombin is a single band on SDS-PAGE and shows no reduction upon incubation with 2-mercaptoethanol.

The above protein was purified from Human plasma that was tested and found negative by FDA accepted methods for Anti-HIV 1/2, Anti-HTLV I & II, HBsAg, Anti-HCV, Syphilis, HBC Ab, HIV-1 p24 Ag or HIV-1 RNA, HCV RNA and HBV RNA. Donors are screened for CJD (Creutzfeld-Jakob Disease).