

SERPINC1

Native Human Antithrombin-III, Immobilized

Catalog No.	CRA160B CRA160C	Quantity:	1.0 mL 10 mL
Alternate Names:	AT3, ATIII		
Description:	Antithrombin III (AT3/SERPINC1) is a small protein that inactivates several enzymes of the Coagulation Cascade. AT3/SERPINC1 is a glycoprotein produced by the liver and consists of 432aa. It contains three disulfide bonds and a total of four possible glycosylation sites. AT3 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.		
	Immobilized Antithrombin-III may be used repeatedly to purify high affinity heparin.		
UniProt ID:	P01008		
Gene ID:	462		
Concentration:	> 1 mg/ml, lot specific		
Source:	Human Plasma		
Molecular Weight:	58.2 kDa		
Formulation:	Liquid 1:1 slurry in 0.1 M Tris-HCl, 0.15 M NaCl, 0.02% Sodium Azide pH 7.4. Precaution: Sodium Azide is a poisonous and hazardous substance which should be handled by trained staff only.		
Purity:	>95% by SDS-PAGE analysis		
Extinction Coefficient:	$E^{0.1\%}_{280nm} = 0.65$		
Application Notes:	Protocol for purifying high affinity Heparin with immobilized AT3: 1. Equilibrate Immobilized AT3 in TBS (0.1 M Tris-HCl + 0.15 M NaCl pH 7.4) or PBS (0.05 M Sodium Phosphate + 0.15 M 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 3 M NaCl in TBS or PBS. 4. Re-equilibrate resin in TBS or PBS. 5. Add 0.02% Sodium Azide for storage.		
Storage & Stability:	Store at 2-8°C.		
Certification:	Purified from Human Plasma that was tested and found negative for HIV-1/2, HIV-1 antigen(s), HBsAg, STS, antiHCV, anti-HBcore and anti-HTLV I & II.		

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