

Datasheet for ABIN934838

alpha-Thrombin Protein





Overview

Quantity:	100 μg
Target:	alpha-Thrombin
Origin:	Human
Source:	Human
Protein Type:	Native
Biological Activity:	Active
Product Details	
Characteristics:	Purified native Human alpha Thrombin protein
	Bioactivity: 4493 units/mg protein- Specific activity is determined by fibrinogen clotting assay
	relative to human NIH standard thrombin.
	Protein Source: Human serum/plasma
Purity:	> 95 % pure
Target Details	
Target:	alpha-Thrombin
Alternative Name:	alpha Thrombin (alpha-Thrombin Products)
Background:	Alpha-thrombin is a highly specific serine protease generated by proteolytic activation of the
	zymogen prothrombin. During coagulation, thrombin cleaves fibrinogen to form fibrin, leading
	to the ultimate step in coagulation, the formation of a fibrin clot. Thrombin is also responsible
	for feedback activation of the procofactors factor V and factor VIII.
	Description: Human serum/plasma.

Target Details

	Alternative Names: Thrombin alpha protein
Molecular Weight:	36.7 kDa
Application Details	
Application Notes:	Each Investigator should determine their own optimal working dilution for specific applications.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	Supplied as a liquid with 50 % Glycerol/H2 O (vol/vol).
Precaution of Use:	Donor samples were tested and found to be negative for anti-HIV-1/2, HIV-1 antigen(s), HBsAg, STS, anti-HCV, anti-HBcore and anti-HTLV I & II. Nonetheless caution should be used when handling this material as there is a margin of error in all tests.
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	-20 °C
Storage Comment:	Aliquot and store at -20 °C.
Publications	
Product cited in:	Steinert, Berg, Kalinin, Jagels, Würthwein, Humpf, Kalinina: "Semisynthetic Approach toward Biologically Active Derivatives of Phenylspirodrimanes from S. chartarum." in: ACS omega , Vol. 7, Issue 49, pp. 45215-45230, (2022) (PubMed).
	Dunker, Imberg, Siutkina, Erbacher, Daniliuc, Karst, Kalinin: "Pyrazole-Based Thrombin Inhibitors with a Serine-Trapping Mechanism of Action: Synthesis and Biological Activity." in: Pharmaceuticals (Basel, Switzerland), Vol. 15, Issue 11, (2022) (PubMed).
	Platte, Korff, Imberg, Balicioglu, Erbacher, Will, Daniliuc, Karst, Kalinin: "Microscale Parallel Synthesis of Acylated Aminotriazoles Enabling the Development of Factor XIIa and Thrombin Inhibitors." in: ChemMedChem , Vol. 16, Issue 24, pp. 3672-3690, (2022) (PubMed).