



Human α -Thrombin (Factor IIa)

人 α -凝血酶 (冻干粉)

产品简介

α -凝血酶 (α -Thrombin) 是一种由凝血酶原水解活化产生的高度特异性的丝氨酸蛋白酶。凝血过程中, 凝血酶切割纤维蛋白原形成纤维蛋白, 进而到血液凝固的最后一步, 产生纤维蛋白凝块。凝血酶也负责反馈激活辅助因子原凝血因子 V (factor V) 和凝血因子 VIII (factor VIII)。凝血酶还能活化凝血因子 XIII (factor XIII) 和血小板, 以及用作一种血管收缩蛋白。凝血酶的促凝血活性通过两种方式终止: 1) 通过肝素辅因子 II (HC II) 或抗凝血酶 III/肝素混合物; 2) 血栓调节蛋白复合物的生成。凝血酶/血栓调节蛋白复合物的生成使得凝血酶丧失活性, 不能切割纤维蛋白原和活化凝血因子 V 和凝血因子 VIII, 但提高凝血因子对抗凝血因子蛋白 C 的激活效率。

α -凝血酶是一种双链酶, 由一条 NH₂-末端的 A 链 (Mw ~6,000) 和一条 COOH-末端的 B 链 (Mw ~31,000), 通过一个二硫键共价连接而成。 α -凝血酶除了广泛用在凝血研究外, 还能一种有效的工具蛋白酶, 位点特异性切割融合蛋白。凝血酶敏感位点 (识别序列) 被插入待研究重组蛋白和利于蛋白纯化和/或表达的多肽/蛋白之间。目的蛋白通过凝血酶的切割从杂合表达的蛋白中释放出来, 而凝血酶本身也很容易通过亲和色谱纯化而去除。

本品从纯化的人凝血酶原水解活化而来, 以冻干粉形式供应, 溶于水配制成储存液 (1mg/ml)。产品经凝血酶特异性的凝血实验检测酶活。

产品组成

名称	编号	FS1118	FS1118	Storage
Human α -Thrombin 人 α -凝血酶 (冻干粉)		100ug	1MG	-20℃
使用说明书		1 份		

产品特性

- 1) CAS : 9002-04-4
- 2) 同义名: Factor IIa 凝血因子 IIa;
- 3) 分子量: 36,700
- 4) 消光系数: E1%_{1cm}=18.3
- 5) 纯度: >95% (SDS-PAGE)
- 6) 比活力: ~3800 NIH units/mg (详见标签)
- 7) 等电点: 7.0-7.6
- 8) 保存与运输方法: -20℃ 保存, 1 年有效, 冰袋运输

注意事项

- 1) 本品为定制产品, 冻干粉形式提供。使用前请将 1mg 本品用 1ml 水充分溶解, 得到溶于 PBS, pH 7.2 的 1mg/ml 储存液。
- 2) 为了您的安全和健康, 请穿实验服并戴一次性手套操作。



Certificate of Analysis

Product Description

Product Name	Human α -Thrombin 人 α -凝血酶 (冻干粉)
CAS NO.	9002-04-4
CAT. NO.	FS1118
Package	100ug/1mg
LOT NO.	M2663XP1811
Extinction Coefficient	$E_{1\text{cm}, 280\text{nm}}^{1\%} = 18.3$
Molecular Weight	36700
Storage	Store desiccated at +4°C
Expiration Date	12 months upon receiving

Quality Control

TEST	RESULT
Concentration	Lyophilized @ 1mg/ml+ + Reconstitute with 1ml water to achieve 1mg/ml in PBS, pH 7.2
Specific Activity	3420U/mg++ ++ Specific activity is determined by fibrinogen clotting assay relative to human NIH standard thrombin.
Conclusion	Accords with the enterprise standard

& Product Notes: Products contained are of human blood/plasma origin. Although the starting material was tested prior to initiation of the manufacturing process, and was found negative or nonreactive for anti-HIV-1/2, HIV-1 RNA, HBsAg, STS, anti-HCV, HCV RNA, anti-HBcore and anti-HTLV I&II, and Zika (by investigational NAT). Extreme caution should be used when handling this material as there is a margin of error in all tests, and testing does not always disclose pathogens or other harmful substances contained in blood/ plasma products.

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**Thank You,
Quality Assurance**