9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

Thrombin Bovine

Bovine Thrombin
NTP0053

Product Overview

Name	Thrombin Bovine

Description

Bovine Thrombin

Synonyms

Coagulation Factor II (Thrombin), Prepro-Coagulation Factor II, EC 3.4.21.5, RPRGL2, THPH1, Coagulation Factor II, Prothrombin B-Chain, Serine Protease, Prothrombin, EC 3.4.21, PT, F2.

Introduction

Thrombin enzyme (Activated Factor IIa) is an important clotting promoter that controls the transformation of soluble fibrinogen to insoluble active fibrin strands. Thrombin is a coagulation protein and a serine protease (EC 3.4.21.5) that catalyzes many coagulation-related reactions. Thrombin triggers factor-XI, factor-V, Factor-XIII and factor-VIII. Thrombin endorses platelet activation, using activation of protease-activated receptors on the platelet. As a result of its high proteolytic specificity, thrombin has become an important biochemical protein. The thrombin cleavage site (Leu-Val-Pro-Arg-Gly-Ser) is widely used in linker regions of recombinant fusion protein constructs. After the purification of the fusion protein, thrombin is used to cleave between the Arginine and Glycine residues of the cleavage site, efficiently removing the purification tag from the protein of interest with a high degree of specificity.

Source

Bovine Blood.

Physical Appearance

Sterile Filtered beige lyophilized (freeze-dried) powder.

Formulation

Lyophilized freeze dry powder formulated with glycine, CaCl2 and sodium chloride, PH 6.8.

Stability

Lyophilized Thrombin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Thrmbin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Biological Activity

164 US units/mg protein.

Solubility

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It is recommended to reconstitute the lyophilized Thrombin in 0.9% NaCl.

Precautions

Thrombin Bovine is for research use only and not for use in diagnostic or therapeutic procedures.