

Thrombin Bovine, Purified Protein

Product Data Sheet

Cat. No.: A1447002 A1447010 A1447100 **Size:** 2000 U 10,000 U 100,000 U

Description

Thrombin Bovine, purified native protein, lyophilized.

Summary

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.

Application

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.

Other names

Native thrombin protein, Bovine Activated Factor IIa, Factor 2A, F2, PT, RPRGL2, THPH1, coagulation factor II, EC 3.4.21.5, UniProtKB# P00735.

Type

Purified protein

update.: 2023.12



Source

Bovine blood

CAS Registry No.

9002-04-4

Biological Activity

164 US units/mg protein (NOTE: may vary with each lot number, please refer to the datasheet enclosed with your product).

Formulation

Sterile filtered beige lyophilized (freeze-dried) powder. Lyophilized powder formulated with glycine, CaCl2 and sodium chloride, PH 6.8.

Reconstitution

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

Shipping

Ships at ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage/Expiration

Lyophilized Thrombin, although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution, Thrombin 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 avoid multiple freeze-thaw cycles.**

Usage

This product is intended for **Laboratory Research Use Only**. Not for use in diagnostic or therapeutic procedures. This product may not be used as a pharmaceutical or veterinary drug, agricultural product, or food additive.

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