

# Thrombin Human, Purified Protein (Plasma)

Product Data Sheet

Cat. No.:	A13390500	A13391000	A13392000
Size:	500 µg	1 mg	2 mg

# Description

Thrombin Human, Purified Protein (Plasma) in solution.

## 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

Activated Factor IIa, Factor 2A, F2, PT, RPRGL2, THPH1, coagulation factor II, EC 3.4.21.5, UniProtKB# P00734.

## Туре

Purified protein



#### Source

Human plasma

# CAS Registry No.

9002-04-4

# **Biological Activity**

The specific activity was found to be 2435 NIH Units/mg (*NOTE: may vary with each lot number, please refer to the datasheet enclosed with your product*).

# Formulation

Sterile filtered liquid solution. The Thrombin solution contains 0.15M NaCl, 0.1M Tris, pH 7.4.

# Shipping

Ships on regular ice packs. Upon receipt, store the product at the temperature recommended below.

## Storage/Expiration

Store at 4° C if entire vial will be used within 7 days. Store frozen at -20° C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% <u>HSA or</u> <u>BSA</u>). **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.