

Active Native Pig Thrombin

Cat. No. Thrombin-20H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Species Pig

Source Pig Blood

Description

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.

Form Sterile Filtered White lyophilized (freeze-dried) powder.

Bio-activity 150 u/mg

Purity Single band

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Storage 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 prevent freeze-thaw cycles.

Reconstitution It is recommended to reconstitute the lyophilized Thrombin in sterile 18 M Ω-cm H₂O.

GENE INFORMATION

Gene Name F2 coagulation factor II (thrombin) [*Sus scrofa*]

Official Symbol F2

Synonyms prothrombin; thrombin

Gene ID 100144442

mRNA Refseq NM_001122985

Protein Refseq NP_001116457

UniProt ID Q19AZ8

Chromosome Location 2; 2

Pathway Complement and coagulation cascades, organism-specific biosystem; Neuroactive ligand-receptor interaction, organism-specific biosystem; Neuroactive ligand-receptor interaction, conserved biosystem

Function calcium ion binding; serine-type endopeptidase activity

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