

Active Native Cattle Thrombin

Cat. No. Thrombin-21H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Species Cattle

Source Cattle 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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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) [Bos taurus]

Official Symbol F2

Synonyms prothrombin; thrombin

Gene ID 280685

mRNA Refseq NM_173877

Protein Refseq NP_776302

UniProt ID P00735

Chromosome Location chromosome: 15

Pathway Cell surface interactions at the vascular wall, organism-specific biosystem; Class A/1 (Rhodopsin-like receptors), organism-specific biosystem; Common Pathway, organism-specific biosystem

Function calcium ion binding; fibrinogen binding; protein binding

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA