

## Active Native Bovine Thrombin

Cat. No. F2-90B Lot. No. (See product label)

### SPECIFICATION

**Species** Bovine

**Source** Bovine Plasma

**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** Lyophilized

**Bio-activity** >1500 units/mg powder.

**Molecular Mass** 37 kDa

**Purity** Purity by SDS-PAGE: ≥98%

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<b>Usage</b>	For Research Use Only! Not For Use in Humans.
<b>Notes</b>	Centrifuge the vial prior to opening
<b>Storage</b>	-20°C
<b>Storage Buffer</b>	Sterile filtered and lyophilized with Mannitol and Sodium Chloride.
<b>Reconstitution</b>	Reconstitute in sterile water (100 U/ml) with 0.9% NaCl. It forms a clear solution.
<b>Shipping</b>	Gel pack
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	F2 coagulation factor II (thrombin) [ Bos taurus ]
<b>Official Symbol</b>	F2
<b>Synonyms</b>	prothrombin; thrombin
<b>Gene ID</b>	<a href="#">280685</a>
<b>mRNA Refseq</b>	<a href="#">NM_173877</a>
<b>Protein Refseq</b>	<a href="#">NP_776302</a>
<b>UniProt ID</b>	<a href="#">P00735</a>
<b>Chromosome Location</b>	chromosome: 15
<b>Pathway</b>	Cell surface interactions at the vascular wall, organism-specific biosystem;

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Complement and coagulation cascades, organism-specific biosystem; GPCR ligand binding, organism-specific biosystem

**Function**

calcium ion binding; fibrinogen binding; receptor binding

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