

F2

## Native Porcine Thrombin

<b>Catalog No.</b>	CNP003A	<b>Quantity:</b>	500 U
	CNP003B		1000 U
	CNP003C		2000 U

**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 that catalyzes many coagulation-related reactions. Thrombin triggers factor-XI, factor-V, Factor-XIII and factor-VIII. Thrombin promotes 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.

**Gene ID:** 100144442

**Source:** Porcine Blood

**Formulation:** Sterile filtered lyophilized powder from 20 mM PBS, 7.4, + 0.9% NaCl.

**Biological Activity:** One unit is defined as the amount of enzyme needed to cleave 1 mg of fusion protein in 16 hours to 95% completion at 20°C in a buffer containing 25 mM Tris-HCl, pH 8.4, + 150 mM NaCl + 2.5 mM CaCl<sub>2</sub>.

**Reconstitution:** Reconstitute in sterile distilled water.

**Storage & Stability:** Lyophilized product is stable at room temperature for up to 3 weeks. On receipt store lyophilized protein at -20°C to -80°C. Reconstituted protein is stable for one week at 4°C. For long term storage, aliquot and store at -20°C to -80°C with a carrier protein such as 0.1% HSA or BSA as a stabilizer. This depends upon the particular application employed. **Avoid repeated freeze-thaw cycles.**

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

