

F2

Recombinant Human Thrombin, Active

Catalog No.	CS433A	Quantity:	10 µg
	CS433B		50 µg
	CS433C		100 µg

Alternate Names: Prothrombin, Coagulation factor II, F2

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.

UniProt ID: P00734

Source: HEK293 cell line

Molecular Mass: 36 kDa

Formulation: Sterile filtered 20mM MES, pH 6.0 containing 500mM choline chloride

Purity: > 95.0% as determined by SDS-PAGE.

Biological Activity: 5396 NIH Units/mg.
The activity was determined in NIH units by comparing to Sigma's human plasma thrombin. Protein concentration was measured using E(0.1%)@280nm = 1.83.

Assay: Thrombin (1nM) was assayed using SPECTROZYME TH as a substrate (20µM) in 5mM Tris-HCl, pH8.0, 0.1% PEG, 200mM NaCl at 25°C

Storage & Stability: Store at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**

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