

Thrombin, Active, Human Plasma recombinant protein
Activated Factor IIa
Catalog # PBV11200r**Specification**

Thrombin, Active, Human Plasma recombinant protein - Product info

Primary Accession [P00734](#)
Calculated MW **37 kDa KDa**

Thrombin, Active, Human Plasma recombinant protein - Additional Info

Gene ID	2147
Gene Symbol	F2
Other Names	
Activated Factor IIa	
Gene Source	Human
Source	Human Plasma
Assay&Purity	SDS-PAGE; ≥95%
Assay2&Purity2	N/A;
Recombinant	No
Results	>3000 units/mg protein.
Target/Specificity	
Thrombin	

Application Notes

A working stock solution can be prepared by adding 1 mL buffered saline, pH 7.4 (ex. 25 mM HEPES, 150 mM NaCl, 0.1% PEG 8000, pH 7.4). Further dilution should be made in buffer containing a suitable stabilizing agent such as 0.1%-1% Prionex, BSA, or PEG.

Format

Lyophilized

Storage

-20°C; Lyophilized from a buffer composed of 20 mM Bis-Tris, 150 mM NaCl and 0.1% PEG 8000, pH 6.5.

Thrombin, Active, Human Plasma recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

Thrombin, Active, Human Plasma recombinant protein - Images

Thrombin, Active, Human Plasma recombinant protein - Background

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.

Thrombin, Active, Human Plasma recombinant protein - References

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Wang W.,et al.Haemophilia 10:94-97(2004).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Suzuki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.
Degen S.J.F.,et al.Biochemistry 22:2087-2097(1983).