

This product is still under development. Please contact us if you have interest in this product. We will accelerate the development process accordingly and reserve this product for you as request.

**Synonym**

thrombin, Coagulation factor II

**Source**

Human Coagulation Factor II, His Tag (THN-H52H0) is expressed from human 293 cells (HEK293). It contains AA Gln 25 - Glu 622 (Accession # AAH51332).

Predicted N-terminus: Gln 25

**Molecular Characterization**

Thrombin(Gln 25 - Glu 622) AAH51332	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 69.5 kDa.

**Endotoxin****Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

**Storage**

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**Background**

Prothrombin is also known as coagulation factor II (F2), which can be cleaved into the following 4 chains: activation peptide fragment 1, activation peptide fragment 2, thrombin light chain and thrombin heavy chain. Coagulation factor II (F2) is able to form a heterodimer with SERPINA5. The mutations of F2 gene can result in a very rare blood coagulation disorder characterized by mucocutaneous bleeding symptoms. Furthermore, thrombin converts fibrinogen to fibrin and activates factors V, VII, VIII, XIII, and, in complex with thrombomodulin, protein C. Coagulation factor II (F2) can also play an important role in blood homeostasis, inflammation and wound healing.

**References**

- (1) [Degen S.J.F., et al., 1983, Biochemistry 22:2087-2097.](#)
- (2) [Butkowski R.J., et al., 1977, J. Biol. Chem. 252:4942-4957.](#)
- (3) [Fife C., et al., 2007, Wound Repair Regen. 15:23-34.](#)

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.