


Blood Coagulation

Intrinsic PW

- formation of high-molecular-weight kininogen (HMWK)
- Prekallikrein,
- And FXII (Hageman factor)

Granules of blood plasma

- ADP
- Serotonin
- Platelet activating factor

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- Thrombin is generated by activated platelets at the initiation of the platelet plug.
 - Which in turn promotes more platelet activation.

Cell-based scheme of coagulation

- Cellular and biochemical events that occur during the coagulation process
- The initiation phase, mediated by the tissue factor exposure
- The classic extrinsic pathway and contributes to about 5% of thrombin production

Initiation PW

- The amplified production of thrombin
- Classic intrinsic pathway in the propagation phase;
- About 95% of thrombin generated will be during this second phase

Cofactors

- **Calcium and phospholipids**
- **Vitamin K**



Regulators

- **Protein C**
- **Antithrombin**



Tissue factor pathway inhibitor (TFPI)

- **Plasmin**
- **Prostacyclin**
- **Fibrinolysis**

Role in disease

- **Coagulation factor disorders**

- **Platelet disorders**

Source: <https://en.wikipedia.org/wiki/Coagulation>

