


Blood Coagulation

- **Platelet activation**
- Glycoprotein Ib/IX/V and A1 domain
- Glycoprotein VI

Granules of blood plasma

- ADP
- Serotonin
- Platelet activating factor

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- Thromboxane A₂
 - Calcium concentration in the platelets
 - Calcium activates protein kinase C
 - Activation of Phospholipase A₂

Coagulation cascade


- Secondary homeostasis: two initial pathways
- A) Contact activation pathway (IP)
- B) Tissue factor pathway (EP)


Coagulation factor

- Serine protease
- Transglutaminase
- Zymogen

Extrinsic PW

- Thrombin burst
- Stromal fibroblasts and leukocytes), forming an activated complex (TF-FVIIa).

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- **TF-FVIIa activates FIX and FX.**
 - **FVII is itself activated by thrombin, FXIa, FXII, and FXa.**

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- Tissue factor pathway inhibitor (TFPI).
 - FXa and its co-factor FVa form the prothrombinase complex, which activates prothrombin to thrombin.

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- Activation of other components of the coagulation cascade

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