

Prothrombin (Factor II), Human

9.0 mg

Ref#: HF2
Lot#: xxxxxx
Exp. Date: xxxx-xx



For Research Use Only
Not for Use in Diagnostic Procedures
For *in vitro* Use Only

Description:	Prothrombin (Human)
Format:	Lyophilized in 20 mM Tris-HCl / 0.1 M NaCl / pH 7.3
Host:	Human
Storage:	Store between +2 and +8°C After reconstitution aliquot and freeze at ≤-60°C
Reconstitution:	We recommend hydrating the protein with sterile water to the original volume
Volume:	1 vial containing 0.841 mL
Total Protein:	9.0 mg
Concentration:	10.70 mg/mL before lyophilisation by Absorbance; Extinction Coefficient $E^{1\%}_{280} = 13.6$
Molecular weight:	72,000 daltons

Human Prothrombin, also known as coagulation Factor II, is a 72 kDa glycoprotein synthesized in the liver and composed of a single polypeptide chain. Prothrombin is the zymogen form of Thrombin. Prothrombin is cleaved to produce Thrombin by the membrane-bound prothrombinase complex (activated Factor X, activated Factor V and Calcium), the concentration in human plasma is about 100 µg/mL (1.4 µM).

The Prothrombin is >95% as judged by SDS-PAGE. It shows no reduction upon incubation with 2-mercaptoethanol.

The above protein was purified from Human plasma that was tested and found negative by FDA accepted methods for Anti-HIV 1/2, Anti-HTLV I & II, HBsAg, Anti-HCV, Syphilis, HBC Ab, HIV-1 p24 Ag or HIV-1 RNA, HCV RNA and HBV RNA. Donors are screened for CJD (Creutzfeld-Jakob Disease).