Recombinant Mouse Coagulation Factor II / FII / F2 Protein (His tag)

Cat.NO.: TP07735

3th Edition

Synonyms: Cf-2;Cf2;FII

Description: Coagulation Factor II Protein (FII, F2 Protein or Prothrombin) is proteolytically cleaved to form thrombin in the first step of the coagulation cascade which ultimately results in the stemming of blood loss. Coagulation Factor II Protein (FII, F2 Protein) also plays a role in maintaining vascular integrity during development and postnatal life. Prothrombin / Coagulation Factor II is activated on the surface of a phospholipid membrane that binds the amino end of prothrombin / Coagulation Factor II and factor Va and Xa in Ca-dependent interactions; factor Xa removes the activation peptide and cleaves the remaining part into light and heavy chains. The activation process starts slowly because factor V itself has to be activated by the initial, small amounts of thrombin. Prothrombin / Coagulation Factor II is expressed by the liver and secreted in plasma. Defects in prothrombin / Coagulation Factor II are the cause of factor II deficiency (FA2D). It is very rare blood coagulation disorder characterized by mucocutaneous bleeding symptoms. The severity of the bleeding manifestations correlates with blood factor II levels. Defects in Coagulation Factor II are also a cause of susceptibility to thrombosis. It is a multifactorial disorder of hemostasis characterized by abnormal platelet aggregation in response to various agents and recurrent thrombi formation.

Form:PBS

Molecular Weight:69.3 kDa

Sequences: Met 1-Gly 618

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.