Datasheet for ABIN7198801

Prothrombin Protein (His tag)

1 Image

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Overview

Quantity:	20 µg
Target:	Prothrombin (F2)
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Prothrombin protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse Coagulation Factor II/FII/F2 Protein (His Tag)(Active)
Sequence:	Met 1-Gly 618
Characteristics:	A DNA sequence encoding the full length of mouse F2 (NP_034298.1) (Met 1-Gly 618) was expressed, with a C-terminal polyhistidine tag.
Purity:	> 96 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to cleave the fluorogenic peptide substrate Boc-VPR-AMC R&D Systems, Catalog # ES011.The specific activity is > 2000 pmoles/min/µg.(Activation description: The proenzyme needs to be activated by Thermolysin for an activated form)

Target Details

Target:	Prothrombin (F2)

Target Details

Alternative Name:	Coagulation Factor II (F2 Products)
Background:	Background: 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. Synonym: Cf-2,Cf2,FII
Molecular Weight:	69.3 kDa
NCBI Accession:	NP_034298
Pathways:	Complement System, Peptide Hormone Metabolism, Regulation of G-Protein Coupled Receptor Protein Signaling

Application Details

Comment:	85 kDa
Restrictions:	For Research Use only

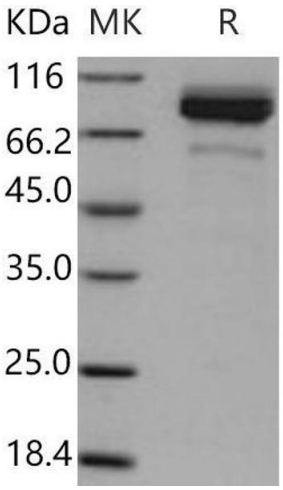
Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C

Handling

Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Images



Western Blotting

Image 1.