

Factor VII heavy chain Rabbit pAb

Factor VII heavy chain Rabbit pAb

Catalog # AP52102

Product Information

Application	WB
Primary Accession	P08709
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51594
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Factor VII heavy chain
Epitope Specificity	301-400/466
Isotype	IgG
Purity	affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Secreted.

DISEASE Defects in F7 are the cause of factor VII deficiency (FA7D) [MIM:227500]. A hemorrhagic disease with variable presentation. The clinical picture can be very severe, with the early occurrence of intracerebral hemorrhages or repeated hemarthroses, or, in contrast, moderate with cutaneous-mucosal hemorrhages (epistaxis, menorrhagia) or hemorrhages provoked by a surgical intervention. Finally, numerous subjects are completely asymptomatic despite very low factor VII levels.

Important Note This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions Coagulation factor VII, also known as Serum prothrombin conversion accelerator, Factor VII, F7 and FVII, is a member of the peptidase S1 family. Factor VII is one of the central proteins in the coagulation cascade. It is an enzyme of the serine protease class. Factor VII contains two EGF-like domains, one Gla (gamma-carboxy-glutamate) domain and one peptidase S1 domain. The main role of factor VII is to initiate the process of coagulation in conjunction with tissue factor (TF). Tissue factor is found on the outside of blood vessels, normally not exposed to the blood stream. The action of the Factor VII is impeded by tissue factor pathway inhibitor (TFPI), which is released almost immediately after initiation of coagulation. Factor VII is vitamin K dependent and is produced in the liver. The use of warfarin or similar anticoagulants impairs its function. Upon vessel injury, tissue factor is exposed to the blood and circulating Factor VII. Once bound to TF, FVII is activated to FVIIa by different proteases, among which are thrombin (factor IIa), factor Xa, IXa, XIIa, and the FVIIa-TF complex itself. The most important substrates for FVIIa-TF are Factor X and Factor IX.

Additional Information

Gene ID	2155
Other Names	Coagulation factor VII, 3.4.21.21, Proconvertin, Serum prothrombin conversion accelerator, SPCA, Eptacog alfa, Factor VII light chain, Factor VII heavy chain, F7
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	F7
Function	Initiates the extrinsic pathway of blood coagulation. Serine protease that circulates in the blood in a zymogen form. Factor VII is converted to factor VIIa by factor Xa, factor XIIa, factor IXa, or thrombin by minor proteolysis. In the presence of tissue factor and calcium ions, factor VIIa then converts factor X to factor Xa by limited proteolysis. Factor VIIa also converts factor IX to factor IXa in the presence of tissue factor and calcium (PubMed: 271951).
Cellular Location	Secreted.
Tissue Location	Plasma.

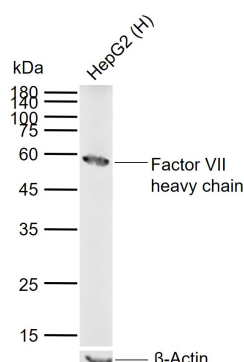
Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

References

Hagen F.S.,et al.Proc. Natl. Acad. Sci. U.S.A. 83:2412-2416(1986).
O'Hara P.J.,et al.Proc. Natl. Acad. Sci. U.S.A. 84:5158-5162(1987).
Sabater-Lleal M.,et al.Hum. Genet. 118:741-751(2006).
Soria J.M.,et al.Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.
Masroori N.,et al.Submitted (MAR-2008) to the EMBL/GenBank/DDBJ databases.

Images



Sample:

Lane 1: Human HepG2 cell lysates

Primary: Anti-Factor VII heavy chain (AP52102) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 28/51 kDa

Observed band size: 59 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.