

# Rabbit Anti-Factor VII heavy chain antibody

## SL4846R

Product Name:	Factor VII heavy chain
Chinese Name:	凝血因子7抗体
Alias:	Factor VII heavy chain; coagulation factor VII (serum prothrombin conversion accelerator); Coagulation factor VII; Eptacog alfa; F7; FA7_HUMAN; Factor VII; Factor VII light chain; FVII coagulation protein; OTTHUMP00000018733; OTTHUMP00000018734; Proconvertin; Serum prothrombin conversion accelerator; SPCA.
文献引用	Specific References(1) SL4846R has been referenced in 1 publications.
Pub Med	[IF=2.93] Liu, Yang, et al. "A Simple Method for Isolating and Culturing the Rat Brain
	Microvascular Endothelial Cells." Microvascular Research (2013).Rat.
	PubMed:23978334
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	17/28kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Factor VII heavy chain:301-400/466
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

# Storage:

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.

#### PubMed:

### PubMed

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 will also convert factor IX to factor IXa in the presence of tissue factor and calcium.

#### **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 will also convert factor IX to factor IXa in the presence of tissue factor and calcium.

#### **Subunit:**

Heterodimer of a light chain and a heavy chain linked by a disulfide bond.

## **Subcellular Location:**

Secreted.

## **Product Detail:**

## Tissue Specificity:

Plasma.

## Post-translational modifications:

The vitamin K-dependent, enzymatic carboxylation of some glutamate residues allows the modified protein to bind calcium.

The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R) stereospecific within EGF domains.

#### 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.

#### Similarity:

Belongs to the peptidase S1 family.

Contains 2 EGF-like domains.

Contains 1 Gla (gamma-carboxy-glutamate) domain.

Contains 1 peptidase S1 domain.

SWISS: P08709

**Gene ID:** 2155

Database links:

Entrez Gene: 2155Human

Omim: 613878Human

SwissProt: P08709Human

Unigene: 36989Human

## **Important Note:**

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

凝血因子7是肝脏合成的一种维生素K依赖性的单链glycoprotein,由406个氨基酸残基组成,分子量约45kD。

凝血因子VII的半衰期最短(4~6h),血浆含量较低(0.5~2mg/L),故可作为肝病患者蛋白质合成功能减退的早期诊断指标。在慢性肝病患者通过肝活检组织原位杂交的方法检测到凝血因子VII的表达与肝纤维化的分级呈负相关,可作为预测纤维化程度的指标。凝血因子VII活性还与预后有着密切的联系,经研究认为:凝血因子VII活性<34%的肝硬化患者93%在随访10月内死亡,故认为它是肝硬化患者预后好坏的早期预测指标,可更好识别肝移植候选人。肝硬化患者凝血因子VII活性可明显下降,凝血因子VII缺乏可导致血小板活性的改变,结合血小板计数减少使出血时间延长,因此对有创诊断与治疗的肝硬化患者,还应该用凝血因子VII活性进行出血危险度的评估,而不能仅看血小板计数。除诊断之外,重组凝血因子VII可以有效地纠正肝病患者凝血异常,有利于有创性检查的进行。

Picture:	75— 63— 48— 48— 35—
	25— 20— 17—
	Sample:  Jurkat(Human) Cell Lysate at 30 ug  Primary: Anti- Factor VII heavy chain (SL4846R) at 1/1000 dilution
	Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
	Predicted band size: 17/28 kD

Observed band size: 50 kD