



# Cleaved Factor VII LC (Arg212) Mouse mAb

<b>Catalog No</b>	YP-mAb-18587
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	F7
<b>Protein Name</b>	Coagulation factor VII
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human FA7. AA range:171-220
<b>Specificity</b>	Cleaved-Factor VII LC (R212) Polyclonal Antibody detects endogenous levels of fragment of activated Factor VII LC protein resulting from cleavage adjacent to R212.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000; IHC 1:100-1:300; ELISA 1:20000; IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	17kD
<b>Cell Pathway</b>	Secreted.
<b>Tissue Specificity</b>	Plasma.
<b>Function</b>	Catalytic activity: Selective cleavage of Arg-Ile bond in factor X to form factor Xa.,Disease: Defects in F7 are the cause of factor VII deficiency [MIM:227500]. Factor VII deficiency is a rare hereditary hemorrhagic disease. The clinical picture can be very severe, with the early occurrence of intracerebral hemorrhages or hemarthroses, or, in contrast, moderate with cutaneous-mucosal hemorrhages (epistaxis, menorrhagia) or hemorrhages provoked by a surgical intervention. Numerous subjects are completely asymptomatic despite a very low F7 level.,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.,online information: Factor VII entry,online information: The Singapore human mutation and polymorphism



database,pharmaceutical:Available under the names Niastase or Novoseven (Novo Nordisk). Used for the treatment of bleeding episodes in hemophilia A or B patients with antibodies to coagulation factors VIII or IX.,polymorphism:Individuals with the Q allele (Gln-413) seems to have a decreased susceptibility to myocardial infarction.,PTM:The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R) stereospecific within EGF domains.,PTM:The vitamin K-dependent, enzymatic carboxylation of some glutamate residues allows the modified protein to bind calcium.,similarity:Belongs to the peptidase S1 family.,similarity:Contains 1 Gla (gamma-carboxy-glutamate) domain.,similarity:Contains 1 peptidase S1 domain.,similarity:Contains 2 EGF-like domains.,subunit:Heterodimer of a light chain and a heavy chain linked by a disulfide bond.,tissue specificity:Plasma.,

## Background

This gene encodes coagulation factor VII which is a vitamin K-dependent factor essential for hemostasis. This factor circulates in the blood in a zymogen form, and is converted to an active form by either factor IXa, factor Xa, factor XIIa, or thrombin by minor proteolysis. Upon activation of the factor VII, a heavy chain containing a catalytic domain and a light chain containing 2 EGF-like domains are generated, and two chains are held together by a disulfide bond. In the presence of factor III and calcium ions, the activated factor then further activates the coagulation cascade by converting factor IX to factor IXa and/or factor X to factor Xa. Defects in this gene can cause coagulopathy. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar proteolytic processing to generate mature polypeptides. [provided by RefSeq, Aug 2015],

## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images

Western blot analysis of extracts of various cell lines, using NBAS antibody (A4748) at 1:1000 dilution.\_Secondary antibody: HRP Goat Anti-Mouse IgG (H+L) (AS014) at 1:10000 dilution.\_Lysates/proteins: 25μ g per lane.\_Blocking buffer: 3% nonfat dry milk in TBST.\_Detection: ECL Enhanced Kit (RM00021).\_Exposure time: 90s