



Rabbit Anti-Plasma kallikrein light chain antibody

SL10796R

Product Name:	Plasma kallikrein light chain
Chinese Name:	血浆激肽释放酶轻链抗体
Alias:	Plasma kallikrein B1; EC 3.4.21.34; Fletcher factor; Kallikrein 3 plasma (Fletcher factor); kallikrein B plasma; Kallikrein B plasma (Fletcher factor) 1; Kallikrein B, plasma 1; Kininogenin; KLK3; KLKB1; KLKB1_HUMAN; Plasma kallikrein; Plasma prekallikrein; PPK; Prekallikrein; Plasma kallikrein light chain.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	27kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Plasma kallikrein light chain:451-550/683
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
Product Detail:	Plasma prekallikrein is a glycoprotein that participates in the surface-dependent activation of blood coagulation, fibrinolysis, kinin generation and inflammation. It is synthesized in the liver and secreted into the blood as a single polypeptide chain.

Plasma prekallikrein is converted to plasma kallikrein by factor XIIa by the cleavage of an internal Arg-Ile bond. Plasma kallikrein therefore is composed of a heavy chain and a light chain held together by a disulphide bond. The heavy chain originates from the amino-terminal end of the zymogen and contains 4 tandem repeats of 90 or 91 amino acids. Each repeat harbors a novel structure called the apple domain. The heavy chain is required for the surface-dependent pro-coagulant activity of plasma kallikrein. The light chain contains the active site or catalytic domain of the enzyme and is homologous to the trypsin family of serine proteases. Plasma prekallikrein deficiency causes a prolonged activated partial thromboplastin time in patients. [provided by RefSeq, Jul 2008]

Function:

The enzyme cleaves Lys-Arg and Arg-Ser bonds. It activates, in a reciprocal reaction, factor XII after its binding to a negatively charged surface. It also releases bradykinin from HMW kininogen and may also play a role in the renin-angiotensin system by converting prorenin into renin.

Subunit:

Forms a heterodimer with SERPINA5. The zymogen is activated by factor XIIa, which cleaves the molecule into a light chain, which contains the active site, and a heavy chain, which associates with HMW kininogen. These chains are linked by one or more disulfide bonds.

Subcellular Location:

Secreted.

Post-translational modifications:

Prekallikrein deficiency (PKK deficiency) [MIM:612423]: This disorder is a blood coagulation defect. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the peptidase S1 family. Plasma kallikrein subfamily.

Contains 4 apple domains.

Contains 1 peptidase S1 domain.

SWISS:

P03952

Gene ID:

3818

Database links:

[Entrez Gene: 3818](#)Human

[Entrez Gene: 25048](#)Rat

[Omid: 229000](#)Human

[SwissProt: P03952](#)Human

[SwissProt: P14272](#)Rat

[Unigene: 237642](#)Human

[Unigene: 9880](#)Rat

Important Note:

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

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