Product Name: **Cleaved-Plasma Kallikrein HC (R390) Rabbit Polyclonal Antibody**
Catalog #: **APRab09027**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight	45kDa

Antigen Information

Gene Name	KLKB1
Alternative Names	KLKB1; KLK3; Plasma kallikrein; Fletcher factor; Kininogenin; Plasma prekallikrein
Gene ID	3818.0
SwissProt ID	P03952
Immunogen	The antiserum was produced against synthesized peptide derived from human KLKB1. AA range:341-390

Background

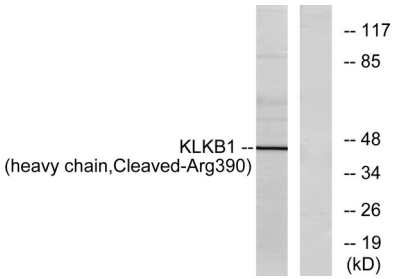
This gene encodes a glycoprotein that participates in the surface-dependent activation of blood coagulation, fibrinolysis, kinin

generation and inflammation. The encoded preproprotein present in plasma as a non-covalent complex with high molecular weight kininogen undergoes proteolytic processing mediated by activated coagulation factor XII to generate a disulfide-linked, heterodimeric serine protease comprised of heavy and light chains. Certain mutations in this gene cause prekallikrein deficiency. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2016],catalytic activity:Cleaves selectively Arg-|-Xaa and Lys-|-Xaa bonds, including Lys-|-Arg and Arg-|-Ser bonds in (human) kininogen to release bradykinin.,disease:Defects in KLKB1 are the cause of prekallikrein deficiency (PKK deficiency) [MIM:612423]; also called Fletcher factor deficiency. This disorder is a blood coagulation defect.,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.,similarity:Belongs to the peptidase S1 family.,similarity:Belongs to the peptidase S1 family. Plasma kallikrein subfamily.,similarity:Contains 1 peptidase S1 domain.,similarity:Contains 4 apple domains.,subunit: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.,

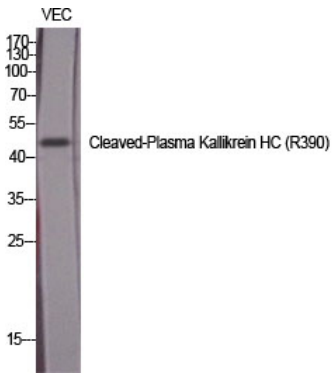
Research Area

Complement and coagulation cascades;

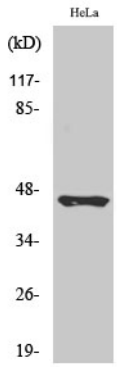
Image Data



Western blot analysis of lysates from HeLa cells, using KLKB1 (heavy chain,Cleaved-Arg390) Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using Cleaved-Plasma Kallikrein HC (R390) Polyclonal Antibody diluted at 1: 1000



Western Blot analysis of HeLa cells using Cleaved-Plasma Kallikrein HC （R390） Polyclonal Antibody diluted at 1：1000