10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KLKB1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14109b

Product Information

Application	WB, E
Primary Accession	P03952
Other Accession	NP_000883.2
Reactivity	Human
Predicted	Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34055
Calculated MW	71343
Antigen Region	508-537

Additional Information

Gene ID	3818
Other Names	Plasma kallikrein, Fletcher factor, Kininogenin, Plasma prekallikrein, Plasma kallikrein heavy chain, Plasma kallikrein light chain, KLKB1, KLK3
Target/Specificity	This KLKB1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 508-537 amino acids from the C-terminal region of human KLKB1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KLKB1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KLKB1
Synonyms	KLK3

Function	Participates in the surface-dependent activation of blood coagulation. Activates, in a reciprocal reaction, coagulation factor XII/F12 after binding to negatively charged surfaces. Releases bradykinin from HMW kininogen and may also play a role in the renin- angiotensin system by converting prorenin into renin.
Cellular Location	Secreted.
Tissue Location	Found in plasma (at protein level).

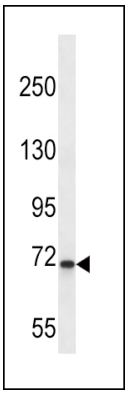
Background

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.

References

MacKenzie, J.A., et al. Appl Physiol Nutr Metab 35(4):518-525(2010)
Han, S., et al. Hum. Immunol. 71(7):727-730(2010)
Rajaraman, P., et al. Cancer Epidemiol. Biomarkers Prev. 19(5):1356-1361(2010)
Eeckhoudt, S.L., et al. Thromb. Haemost. 103(4):866-867(2010)
Barber, M.J., et al. PLoS ONE 5 (3), E9763 (2010) :

Images



KLKB1 Antibody (C-term) (Cat. #AP14109b) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the KLKB1 antibody detected the KLKB1 protein (arrow).

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