

## KLKB1 Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP14109b

## **Specification**

## KLKB1 Antibody (C-term) Blocking peptide - Product Information

Primary Accession

P03952

## KLKB1 Antibody (C-term) Blocking peptide - 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

The synthetic peptide sequence used to generate the antibody AP14109b was selected from the C-term region of KLKB1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

## **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## KLKB1 Antibody (C-term) Blocking peptide - 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).



KLKB1 Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

## • Blocking Peptides

KLKB1 Antibody (C-term) Blocking peptide - Images

## KLKB1 Antibody (C-term) Blocking peptide - Background

Plasma prekallikrein is a glycoprotein that participatesin the surface-dependent activation of blood coagulation, fibrinolysis, kinin generation and inflammation. It is synthesizedin the liver and secreted into the blood as a single polypeptidechain. Plasma prekallikrein is converted to plasma kallikrein byfactor XIIa by the cleavage of an internal Arg-Ile bond. Plasmakallikrein therefore is composed of a heavy chain and a light chainheld together by a disulphide bond. The heavy chain originates from the amino-terminal end of the zymogen and contains 4 tandemrepeats of 90 or 91 amino acids. Each repeat harbors a novelstructure 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.

## KLKB1 Antibody (C-term) Blocking peptide - 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):