

# KLKB1 (Heavy Chain) monoclonal antibody, clone B3352M

Catalog # MAB4873

Size 200 ug

## Specification

<b>Product Description</b>	Mouse monoclonal antibody raised against native KLKB1 (Heavy Chain).
<b>Immunogen</b>	Native purified human plasma prekallikrein.
<b>Host</b>	Mouse
<b>Reactivity</b>	Baboons, Chimpanzee, Human, Monkey
<b>Specificity</b>	Recognizes two variants (88 KDa and 85 KDa) of prekallikrein and its activation products kallikrein (88 KDa and 85 KDa), the complexes formed by kallikrein with its endogenous inhibitors C1 inhibitor, alpha-2-macroglobulin and Antithrombin III, and 45 KDa prekallikrein/kallikrein fragment(s). Recognizes prekallikrein and its activation products in human, chimpanzee, rhesus, and baboon plasmas. The epitope for this antibody, located on the prekallikrein/kallikrein heavy chain, is involved in the interaction between prekallikrein and factor XIIa. This antibody inhibits prekallikrein activation in human and rhesus plasmas by approximately 60-80% and 55%, respectively. This antibody does not cross-react with tissue kallikrein.
<b>Form</b>	Liquid
<b>Purification</b>	Protein G chromatography
<b>Isotype</b>	IgG1
<b>Recommend Usage</b>	ELISA Western Blot The optimal working dilution should be determined by the end user. Prekallikrein activation may occur with repeated freezing/thawing (3x or more) of plasma samples.
<b>Storage Buffer</b>	In PBS, pH 7.4.
<b>Storage Instruction</b>	Store at -20°C. Aliquot to avoid repeated freezing and thawing.

## Applications

- Western Blot

- Enzyme-linked Immunoabsorbent Assay

## Gene Info — KLKB1

Entrez GeneID	<a href="#">3818</a>
Gene Name	KLKB1
Gene Alias	KLK3, PPK
Gene Description	kallikrein B, plasma (Fletcher factor) 1
Omim ID	<a href="#">229000</a>
Gene Ontology	<a href="#">Hyperlink</a>
Gene Summary	<p>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]</p>
Other Designations	Kallikrein, plasma kallikrein 3, plasma kallikrein B plasma kininogenin plasma kallikrein B1

## Pathway

- [Complement and coagulation cascades](#)

## Disease

- [Birth Weight](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Genetic Predisposition to Disease](#)

- [Glioblastoma](#)
- [Glioma](#)
- [Hypertension](#)
- [Leukemia](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Venous Thrombosis](#)