

## Product datasheet

# Anti-HMW Kininogen antibody [C11C1] ab1004

★★★★☆ 2 Abreviews 2 References 1 Image

### Overview

<b>Product name</b>	Anti-HMW Kininogen antibody [C11C1]
<b>Description</b>	Mouse monoclonal [C11C1] to HMW Kininogen
<b>Host species</b>	Mouse
<b>Specificity</b>	This antibody reacts with the unique light chain (mw~46,000) of human HMWK.
<b>Tested applications</b>	<b>Suitable for:</b> WB, ELISA, Neutralising
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Purified high molecular weight kininogen (HMWK).

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	PBS, pH7.2
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	C11C1
<b>Isotype</b>	IgG1

### Applications

Our [Abpromise guarantee](#) covers the use of **ab1004** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★☆	Use at an assay dependent concentration. Dilute in PBS or medium which is identical to that used in the assay system.
ELISA		Use at an assay dependent concentration.

Application	Abreviews	Notes
Neutralising		Use at an assay dependent concentration. This antibody can completely neutralize the coagulant activity of HMWK.

## Target

### Function

(1) Kininogens are inhibitors of thiol proteases; (2) HMW-kininogen plays an important role in blood coagulation by helping to position optimally prekallikrein and factor XI next to factor XII; (3) HMW-kininogen inhibits the thrombin- and plasmin-induced aggregation of thrombocytes; (4) the active peptide bradykinin that is released from HMW-kininogen shows a variety of physiological effects: (4A) influence in smooth muscle contraction, (4B) induction of hypotension, (4C) natriuresis and diuresis, (4D) decrease in blood glucose level, (4E) it is a mediator of inflammation and causes (4E1) increase in vascular permeability, (4E2) stimulation of nociceptors (4E3) release of other mediators of inflammation (e.g. prostaglandins), (4F) it has a cardioprotective effect (directly via bradykinin action, indirectly via endothelium-derived relaxing factor action); (5) LMW-kininogen inhibits the aggregation of thrombocytes; (6) LMW-kininogen is in contrast to HMW-kininogen not involved in blood clotting.

### Tissue specificity

Secreted in plasma. T-kinin is detected in malignant ovarian, colon and breast carcinomas, but not in benign tumors.

### Involvement in disease

Defects in KNG1 are the cause of high molecular weight kininogen deficiency (HMWK deficiency) [MIM:228960]. HMWK deficiency is an autosomal recessive coagulation defect. Patients with HMWK deficiency do not have a hemorrhagic tendency, but they exhibit abnormal surface-mediated activation of fibrinolysis.

### Sequence similarities

Contains 3 cystatin domains.

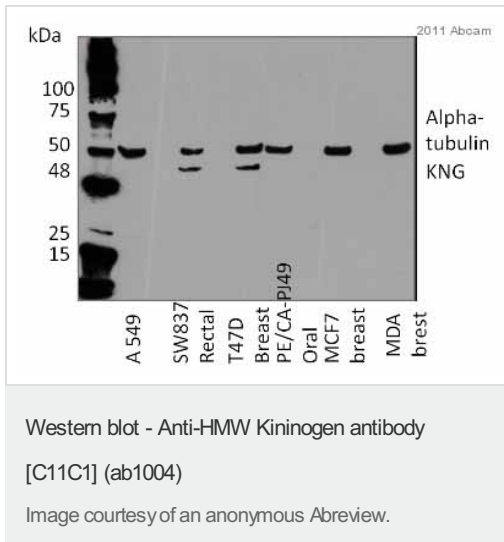
### Post-translational modifications

Bradykinin is released from kininogen by plasma kallikrein.  
Hydroxylation of Pro-383 occurs prior to the release of bradykinin.  
Phosphorylation sites are present in the extracellular medium.  
N- and O-glycosylated. O-glycosylated with core 1 or possibly core 8 glycans.

### Cellular localization

Secreted > extracellular space.

## Images



All lanes: ab1004 at a 1/100 dilution plus 20µg of whole cell lysate prepared from HeLa cells. Goat anti-mouse IgG-HRP secondary used at a 1/1000 dilution. ab1004 reacts with the unique light chain (mw~46,000) of human HMWK.

**Top band:** Alpha tubulin loading control

**Bottom band:** HMW kininogen

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