

Product datasheet

Anti-HMW Kininogen antibody [C11C1] ab1004

★★★★☆ 2 Abreviews 2 References 1 Image

Overview

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

Properties

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

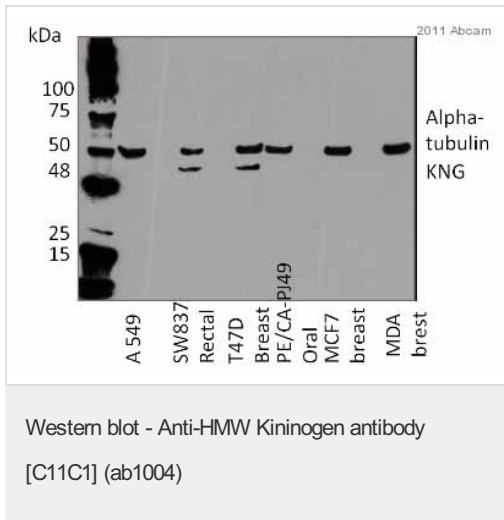


Image courtesy of an anonymous Abreview.

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