

Product datasheet

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ARG54565 anti-HMW Kininogen antibody [C11C1]

Package: 50 μg Store at: -20°C

Summary

Product Description Mouse Monoclonal antibody [C11C1] recognizes HMW Kininogen

Tested Reactivity Hu
Tested Application ELISA

Specificity This antibody reacts with the unique light chain (mw~46,000) of human HMWK and can completely

neutralize the coagulant activity of HMWK.

Host Mouse

Clonality Monoclonal

Clone C11C1

Isotype IgG1

Target Name HMW Kininogen

Species Human

Immunogen Purified high molecular weight kininogen (HMWK).

Conjugation Un-conjugated

Alternate Names Williams-Fitzgerald-Flaujeac factor; Kallidin II; High molecular weight kininogen; KNG; Fitzgerald factor;

Alpha-2-thiol proteinase inhibitor; BDK; BK; Kininogen-1; HMWK; Kallidin I; Ile-Ser-Bradykinin

Application Instructions

Application Note

This antibody may be used in ELISA, Western blot, and coagulation assays. Not all applications are have been investigated.

* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form Liquid

Purification Protein G-purified

Buffer PBS (pH 7.4)

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links <u>GeneID: 3827 Human</u>

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Swiss-port # P01042 Human

Gene Symbol KNG1

Gene Full Name kininogen 1

Background This gene uses alternative splicing to generate two different proteins- high molecular weight kininogen

(HMWK) and low molecular weight kininogen (LMWK). HMWK is essential for blood coagulation and assembly of the kallikrein-kinin system. Also, bradykinin, a peptide causing numerous physiological effects, is released from HMWK. Bradykinin also functions as an antimicrobial peptide with antibacterial and antifungal activity. In contrast to HMWK, LMWK is not involved in blood coagulation. Three transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Nov

2014]

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.

[UniProt]

Research Area Cancer antibody; Cell Biology and Cellular Response antibody; Gene Regulation antibody; Signaling

Transduction antibody

Calculated Mw 72 kDa

PTM Bradykinin is released from kiningen by plasma kallikrein.

Hydroxylation of Pro-383 occurs prior to the release of bradykinin.

Phosphorylated by FAM20C in the extracellular medium.

N- and O-glycosylated. O-glycosylated with core 1 or possibly core 8 glycans.