abcam

Product datasheet

Anti-Kininogen 1 antibody [EPR6097] ab124737

Recombinant RabMAb

3 References 6 Images

Overview

Product name Anti-Kininogen 1 antibody [EPR6097]

Description Rabbit monoclonal [EPR6097] to Kininogen 1

Host species Rabbit

Specificity This antibody detects three isoforms of Kininogen 1: full length (120 kDa), light chain (56 kDa),

and cleavage form (45 kDa).

Tested applications Suitable for: ELISA, WB, IP, IHC-P

Unsuitable for: Flow Cyt

Species reactivity Reacts with: Human, Recombinant fragment

Immunogen Synthetic peptide within Human Kininogen 1 aa 600 to the C-terminus. The exact sequence is

proprietary.

Positive control Human plasma, platelet and ovarian cancer lysates; Human kidney tissue, Human ovarian

adenocarcinoma tissue.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

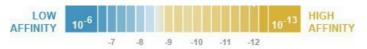
these species. Please contact us for more information.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

 $K_D = 2.70 \times 10^{-12} M$ Dissociation constant (K_D)



Learn more about K_D

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EPR6097

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab124737 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
ELISA		Use at an assay dependent concentration.
WB		1/10000 - 1/50000. Detects a band of approximately 45, 56, 120 kDa (predicted molecular weight: 48, 72 kDa).
IP		1/10 - 1/100.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. Heat up to 98 degrees C, below boiling, and then let cool for 10-20 min

Application notes

Is unsuitable for Flow Cyt.

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 kiningen deficiency (HMWK deficiency)

[MIM:228960]. HMWK deficiency is an autosomal recessive coagulation defect. Patients with HWMK deficiency do not have a hemorrhagic tendency, but they exhibit abnormal surface-

mediated activation of fibrinolysis.

Sequence similaritiesContains 3 cystatin domains.

Post-translational Bradykinin is released from kininogen by plasma kallikrein.

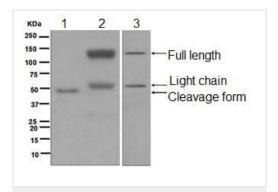
modifications Hydroxylation of Pro-383 occurs prior to the release of bradykinin.

Phosphorylation sites are present in the extracelllular medium.

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

Cellular localization Secreted > extracellular space.

Images



Western blot - Anti-Kininogen 1 antibody [EPR6097] (ab124737)

All lanes : Anti-Kininogen 1 antibody [EPR6097] (ab124737) at 1/10000 dilution

Lane 1: Human plasma

Lane 2: Human platelet tissue lysate

Lane 3: Human ovarian cancer tissue lysate

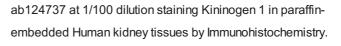
Lysates/proteins at 10 µg per lane.

Secondary

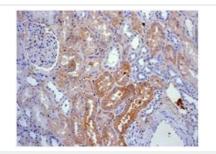
All lanes: Goat anti-rabbit HRP conjugated at 1/2000 dilution

Predicted band size: 48, 72 kDa

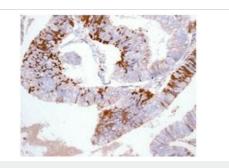
ab124737 is detecting three isoforms of Kininogen 1: full length (120 kDa), light chain (56 kDa), and cleavage form (45 kDa).



Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



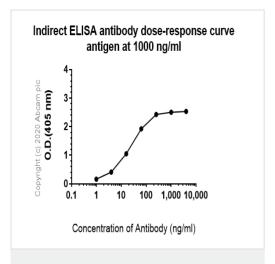
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Kininogen 1 antibody
[EPR6097] (ab124737)



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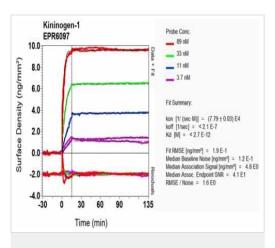
ab124737 at 1/100 dilution staining Kininogen 1 in paraffinembedded Human ovarian adenocarcinoma tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



ELISA - Anti-Kininogen 1 antibody [EPR6097] (ab124737)

ELISA analysis of Human Kininogen-1 recombinant protein at 1000 ng/mL with ab124737. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit lgG (H+L) at 1/2500 dilution was used as the secondary antibody.



Ol-RD Scanning - Anti-Kininogen 1 antibody [EPR6097] (ab124737)

Equilibrium disassociation constant (K_D) Learn more about K_D

Click here to learn more about K_D



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