abcam

Product datasheet

Human Kininogen ELISA Kit (KNG) ab108876

3 References 1 Image

Overview

Product name Human Kininogen ELISA Kit (KNG)

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Overall				3.5%

Inter-assay

Sample	n	Mean	SD	CV%
Overall				9.1%

Sample type Cell culture supernatant, Saliva, Milk, Urine

Assay type Sandwich (quantitative)

Sensitivity = 0.7 ng/ml

Range 1.563 ng/ml - 100 ng/ml

Recovery 96 %

Assay time 4h 00m

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Human

Product overview Abcam's Kininogen (KNG) Human *in vitro* ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of Kininogen in urine, saliva, milk, cerebrospinal fluid and cell culture supernatants.

A Kininogen specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently a Kininogen specific biotinylated detection antibody is added and then followed by washing with wash buffer. Streptavidin-Peroxidase Conjugate is added and unbound conjugates are washed away with wash buffer. TMB is then used to visualize Streptavidin-Peroxidase enzymatic reaction. TMB is catalyzed by Streptavidin-Peroxidase to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is directly proportional to the amount of Kininogen captured in plate.

Get results in 90 minutes with Human HMW Kininogen ELISA Kit (**ab189574**) from our SimpleStep ELISA® range.

The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid repeated freeze-thaw cycles.

Platform Microplate

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
100X Streptavidin-Peroxidase Conjugate	1 x 80µl
10X Diluent N Concentrate	1 x 30ml
20X Wash Buffer Concentrate	2 x 30ml
50X Biotinylated Human Kininogen Antibody	1 x 120µl
Chromogen Substrate	1 x 8ml
Kininogen Microplate (12 x 8 well strips)	1 unit
Kininogen Standard	1 vial
Sealing Tapes	3 units
Stop Solution	1 x 12ml

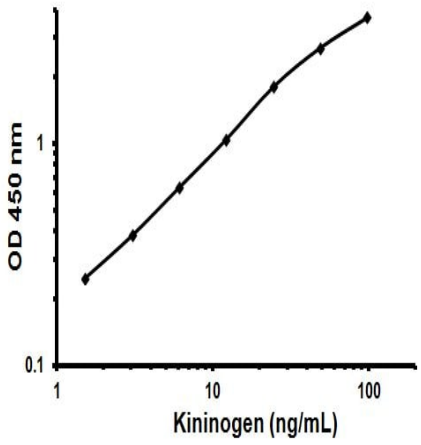
Function (1) Kininogens are inhibitors of thiol proteases; (2) HMW-kininogen plays an important role in blood coagulation by helping to position optimally prekallikrein and factor XI next to factor XII; (3) HMW-kininogen inhibits the thrombin- and plasmin-induced aggregation of thrombocytes; (4) the 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 HWMK 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 extracelllular medium. N- and O-glycosylated. O-glycosylated with core 1 or possibly core 8 glycans.
Cellular localization	Secreted > extracellular space.

Images



Typical Standard Curve

Representative Standard Curve Using ab108876.

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