

ARG30260 Kininogen ELISA Antibody Duo

Package: 1 pair

Component

Cat. No.	Component Name	Host clonality	Reactivity	Application	Package
ARG30260-C					

Summary

Product Description	<p>ELISA Procedure:</p> <ol style="list-style-type: none">1. Plate coatings:<ul style="list-style-type: none">- Dilute the capture antibody with coating buffer at 1:100 dilution, then add 100 µl diluted antibody in each well immediately.- Incubate the plate at 2-8°C overnight (or at 22°C, 2 hr)2. Blocking:<ul style="list-style-type: none">- Remove the coating antibody and add 150 µl of blocking buffer to each well and incubate at 22°C for 60 min.- Wash the plate 3 times with 300 µl wash buffer.3. Samples perpetration:<ul style="list-style-type: none">- Pre-dilute reference plasma with PBST sample diluent at 1:1000 dilution (100%) then 1/2 serial dilution of the plasma to 1/32000 (3.13%).- Sample plasma are diluted with PBST sample diluent at 1/2000, 1/4000 & 1/8000 dilution.- Add 100 µl/well of diluted reference plasma and sample, and incubate at 22°C for 60 min.- Wash the plate 3 times with 300 µl wash buffer.4. Detecting antibody:<ul style="list-style-type: none">- Dilute the detection antibody with conjugate diluent at 1:100 dilution, then add 100 µl diluted antibody in each well.- Incubate the plate at 22°C for 60 min.- Wash the plate 3 times with 300 µl wash buffer.5. Detection:<ul style="list-style-type: none">- Add 100 µl of freshly prepared OPD substrate to each well.- Stand for 5-10 minutes to allow color development.- Add 50 µl of stop solution (2.5 M H₂SO₄) in the well.
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- Read the plate at 490 nm wavelength.

Tested Reactivity	Hu
Target Name	Kininogen
Alternate Names	Williams-Fitzgerald-Flaujeac factor; Kallidin II; High molecular weight kininogen; KNG; Fitzgerald factor; Alpha-2-thiol proteinase inhibitor; BDK; BK; Kininogen-1; kininogen 1; HMWK; Kallidin I; Ile-Ser-Bradykinin; Kininogen ELISA Antibody Duo; Kininogen capture antibody; HRP-conjugated Kininogen detecting antibody

Properties

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

Database links	GeneID: 3827 Human Swiss-port # P01042 Human
Gene Symbol	KNG1
Gene Full Name	ELISA Antibody Duo for Kininogen
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]
PTM	Bradykinin is released from kininogen 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.