

ARG81510 Human HMW Kininogen ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81510-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81510-002	Standard	2 X 50 ng/vial	4°C
ARG81510-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81510-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81510-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81510-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81510-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81510-008	25X Wash buffer	20 ml	4°C
ARG81510-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81510-010	STOP solution	10 ml (Ready to use)	4°C
ARG81510-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81510 Human HMW Kininogen ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human HMW Kininogen in serum, plasma (heparin, EDTA) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	HMW Kininogen
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	78 pg/ml
Sample Type	Serum, plasma (heparin, EDTA) and cell culture supernatants.
Standard Range	156 - 10000 pg/ml
Sample Volume	100 µl

Precision	Intra-Assay CV: 5.8% Inter-Assay CV: 6.4%
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

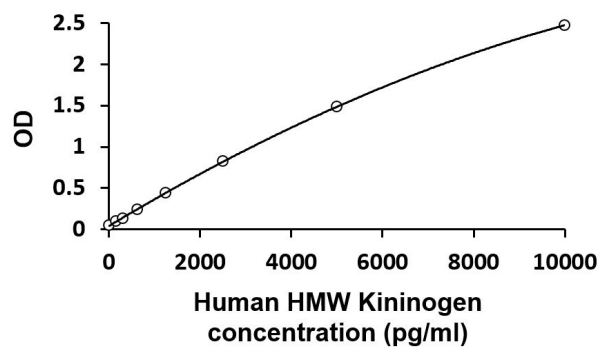
Assay Time	~ 5 hours
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Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

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]
Highlight	Related products: HMW Kininogen antibodies ; HMW Kininogen ELISA Kits ; New ELISA data calculation tool: Simplify the ELISA analysis by GainData
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. [UniProt]



ARG81510 Human HMW Kininogen ELISA Kit standard curve image

ARG81510 Human HMW Kininogen ELISA Kit results of a typical standard run with optical density reading at 450 nm.