

Rabbit Anti-LMW growth-promoting factor antibody

SL18318R

Product Name:	LMW growth-promoting factor
Chinese Name:	低分子量生长促进因子/激肽原1抗体
Alias:	LMW Kininogen; Alpha-2-thiol proteinase inhibitor; BDK; BK; Fitzgerald factor; High molecular weight kininogen; HMWK; Ile-Ser-Bradykinin; Kallidin I; Kallidin II; Kininogen 1; KNG; KNG1; KNG1_HUMAN; LMW; Low molecular weight growth promoting factor; Low molecular weight growth-promoting factor; Low molecular weight kininogen; Williams-Fitzgerald-Flaujeac factor.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	28kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human LMW Kininogen:431-434/644
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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. 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, Oct 2009]

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.

Subcellular Location:

Secreted; extracellular space.

Tissue Specificity:

Secreted in plasma. T-kinin is detected in malignant ovarian, colon and breast carcinomas, but not in benign tumors.

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

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.

Similarity:

Contains 3 cystatin kiningen-type domains.

SWISS:

P01042

	Gene ID: 3827
	Database links:
	Entrez Gene: 3827 Human
	Omim: 612358 Human
	SwissProt: P01042 Human
	Unigene: 77741 Human
	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	75—63—48—25— — LMW growth-promoting factor 20—17—11—
	Sample:

Lung (Mouse) Lysate at 40 ug

Primary: Anti- LMW growth-promoting factor (SL18318R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 28 kD

Observed band size: 28 kD

