10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KNG1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11683a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P01042
Other Accession	NP_001095886.1, NP_000884.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18408
Calculated MW	71957
Antigen Region	138-166

Additional Information

Gene ID	3827
Other Names	Kininogen-1, Alpha-2-thiol proteinase inhibitor, Fitzgerald factor, High molecular weight kininogen, HMWK, Williams-Fitzgerald-Flaujeac factor, Kininogen-1 heavy chain, T-kinin, Ile-Ser-Bradykinin, Bradykinin, Kallidin I, Lysyl-bradykinin, Kallidin II, Kininogen-1 light chain, Low molecular weight growth-promoting factor, KNG1, BDK, KNG
Target/Specificity	This KNG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 138-166 amino acids from the N-terminal region of human KNG1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KNG1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KNG1

Synonyms	BDK, KNG
Function	Kininogens are inhibitors of thiol proteases. HMW-kininogen plays an important role in blood coagulation by helping to position optimally prekallikrein and factor XI next to factor XII; HMW-kininogen inhibits the thrombin- and plasmin-induced aggregation of thrombocytes. LMW-kininogen inhibits the aggregation of thrombocytes. LMW-kininogen is in contrast to HMW-kininogen not involved in blood clotting.
Cellular Location	Secreted, extracellular space.
Tissue Location	Secreted in plasma. T-kinin is detected in malignant ovarian, colon and breast carcinomas, but not in benign tumors.

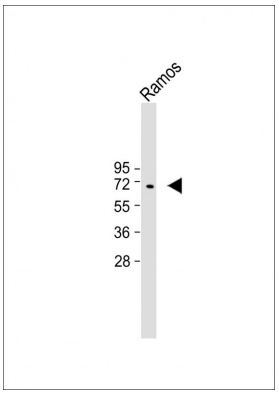
Background

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. In contrast to HMWK, LMWK is not involved in blood coagulation. Three transcript variants encoding different isoforms have been found for this gene.

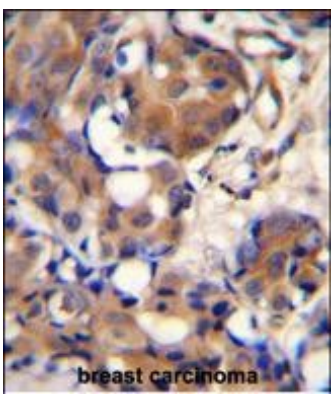
References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Houlihan, L.M., et al. Am. J. Hum. Genet. 86(4):626-631(2010)
Khan, M.M., et al. Am. J. Physiol. Heart Circ. Physiol. 298 (2), H652-H658 (2010) :
Bellucci, F., et al. Br. J. Pharmacol. 158(8):1996-2004(2009)

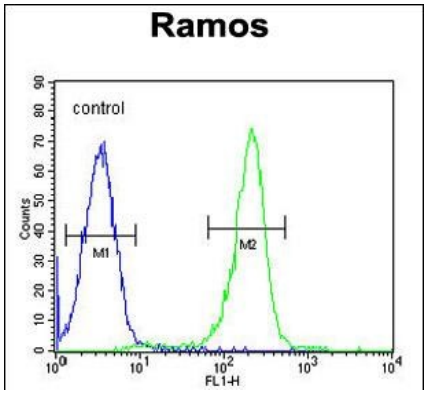
Images



Anti-KNG1 Antibody (N-term) at 1:1000 dilution + Ramos whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 72 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



KNG1 Antibody (N-term) (Cat. #AP11683a)immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of KNG1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



KNG1 Antibody (N-term) (Cat. #AP11683a) flow cytometric analysis of Ramos cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.