

## Product datasheet for **RC208879**

### **Kininogen 1 (KNG1) (NM\_000893) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kininogen 1 (KNG1) (NM_000893) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kininogen 1
Synonyms:	BDK; BK; HAE6; HMWK; KNG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC208879 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAAACTAATTACCATCCTTTCTCTGCTCCAGGCTACTACTAAGTTTAAACCAGGAATCACAGTCCG  
 AGGAAATTGACTGCAATGACAAGGATTTATTTAAAGCTGTGGATGCTGCTCTGAAGAAATAAACAGTCA  
 AAACCAAAGTAACAACCGTTTGTATTGTACCGCATAACTGAAGCCACTAAGACGGTTGGCTCTGACACG  
 TTTTATTCCTTCAAGTACGAAATCAAGGAGGGGATTGTCCTGTTCAAAGTGGCAAAACCTGGCAGGACT  
 GTGAGTACAAGGATGCTGCAAAAGCAGCCACTGGAGAATGCACGGCAACCGTGGGGAAGAGGAGCAGTAC  
 GAAATTCTCCGTGGCTACCCAGACCTGCCAGATTACTCCAGCCGAGGGCCCTGTGGTGACAGCCCAGTAC  
 GACTGCCTCGGCTGTGTGCATCTATATCAACGCAGAGCCAGACCTGGAGCCCATTCTGAGACACGGCA  
 TTCAGTACTTTAAACAACAACACTCAACATTCCTCCCTTTCATGCTTAATGAAGTAAAACGGGCCAAAG  
 ACAGGTGGTGGCTGGATTGAACTTTCGAATGACCTACTCAATTGTGCAAACGAATTGTTCCAAGAGAAT  
 TTTCTGTTCTTAACTCCAGACTGCAAGTCCCTTTGGAATGGTGATACCGTGAATGTACAGATAATGCAT  
 ACATCGATATTCAGCTACGAATTGCTTCCTTCTCACAGAAGTGTGACATTTATCCAGGGAAGGATTTTGT  
 ACAACCACCTACCAAGATTTGCGTGGGCTGCCCCAGAGATATACCCACCAACAGCCAGACTGGAGGAG  
 ACACTGACTCACACCATCACAAGCTTAATGCAGAGAATAACGCAACTTCTATTTCAAGATTGACAATG  
 TGAAAAAGCAAGAGTACAGGTGGTGGCTGGCAAGAAATATTTTATTGACTTCGTGGCCAGGGAAACCAC  
 ATGTTCCAAGGAAAGTAAATGAAGAGTTGACCGAAAGCTGTGAGACCAAAAACTTGCCAAAGCCTAGAT  
 TGCAACGCTGAAGTTTATGTGGTACCCTGGGAGAAAAATTTACCTACTGTCAACTGTCAACCACTGG  
 GAATGATCTCACTGATGAAAAGGCCTCCAGGTTTTTACCTTTCCGATCATCACGAATAGGGGAAATAAA  
 AGAAGAAACAACACTAGTCACCTAAGGTCTGCGAGTACAAGGTCGACCCCAAGGCAGGGGCAGAGCCA  
 GCATCTGAGAGGGAGGTCTCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC208879 protein sequence  
 Red=Cloning site Green=Tags(s)

MKLITILFLCSRLLSLTQESQSEEDCNKDLKAVDAALKKYNSQNQSNQFVLYRITEATKTVGSDT  
 FYSFKYEIKEGDCPVQSGKTWQDCEYKDAAKAATGECTATVGKRSSTKFSVATQTCQITPAEGPVVTAQY  
 DCLGCVHPISTQSPDLEPILRHGIQYFNNNTQHSSLFMLEVVKRAQRQVAVGLNFRMTYSIVQTNCSKEN  
 FLFLTPDCKSLWNGDTGECTDNAYIDIQLRIASFQNCIDIYPGKDFVQPPTKICVGCPRDIPTNSPELEE  
 TLTHITIKLNAENNATFYFKIDNVKKARVQVAGKKYFIDFVARETTCSKESNEELTESCETKKLQSLD  
 CNAEVYVVPWEKKIYPTVNCQPLGMIISLMKRPPGFSFRRSRIGEIKEETTSHLRSEYKGRPPKAGAEP  
 ASEREVS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6035\\_e06.zip](https://cdn.origene.com/chromatograms/mk6035_e06.zip)

**Restriction Sites:**

SgfI-MluI



**Domains:** CY

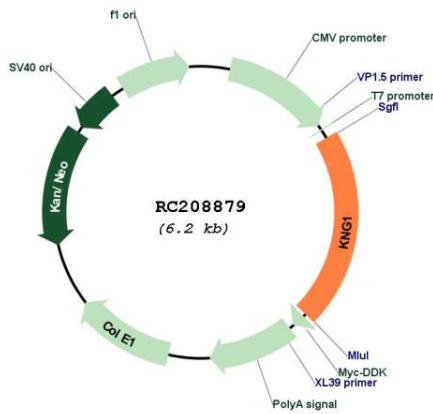
**Protein Families:** Druggable Genome, Secreted Protein

**Protein Pathways:** Complement and coagulation cascades

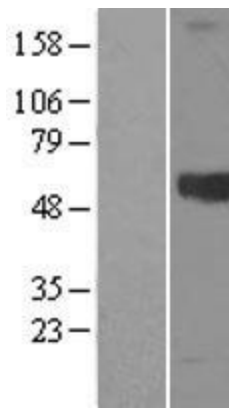
**MW:** 47.9 kDa

**Gene Summary:** 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. Infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) reduces or depletes angiotensin converting enzyme 2 (ACE2), which results in an increase in levels of des-Arg(9)-bradykinin, a bioactive metabolite of bradykinin that is associated with lung injury and inflammation. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2020]

**Product images:**



Circular map for RC208879



Western blot validation of overexpression lysate (Cat# [LY400319]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208879 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KNG1 protein (Cat# [TP308879]). The protein was produced from HEK293T cells transfected with KNG1 cDNA clone (Cat# RC208879) using MegaTran 2.0 (Cat# [TT210002]).