

## Product datasheet for RC229983L2V

## OriGene Technologies, Inc.

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## Kininogen 1 (KNG1) (NM 001166451) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: Kininogen 1 (KNG1) (NM 001166451) Human Tagged ORF Clone Lentiviral Particle

Symbol: Kininogen 1

Synonyms: BDK; BK; HAE6; HMWK; KNG

Mammalian Cell

Selection:

None

**Vector:** pLenti-C-mGFP (PS100071)

Tag: mGFP

**ACCN:** NM\_001166451

ORF Size: 1173 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC229983).

Sequence:
OTI Disclaimer:

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: <u>NM 001166451.1</u>

 RefSeq ORF:
 1176 bp

 Locus ID:
 3827

 UniProt ID:
 P01042

 Cytogenetics:
 3q27.3

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

**Protein Pathways:** Complement and coagulation cascades

MW: 44.3 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]