

Product datasheet for RC220712L4

OriGene Technologies, Inc.

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Kininogen 1 (KNG1) (NM_001102416) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Kininogen 1 (KNG1) (NM_001102416) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Kininogen 1

Synonyms: BDK; BK; HAE6; HMWK; KNG

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC220712).

Sequence:

The one insert of this cione is exactly the same as (nezzor)

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001102416

ORF Size: 1932 bp



Kininogen 1 (KNG1) (NM_001102416) Human Tagged Lenti ORF Clone - RC220712L4

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.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001102416.1</u>

 RefSeq Size:
 2147 bp

 RefSeq ORF:
 1935 bp

 Locus ID:
 3827

 UniProt ID:
 P01042

Cytogenetics:

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Complement and coagulation cascades

3q27.3

MW: 71.8 kDa

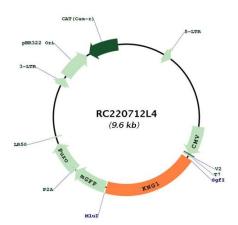
Gene Summary: This gene uses alternative splicing to generate two different proteins- high molecular weight

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 RC220712L4