

Product datasheet for RC224667L3

OriGene Technologies, Inc.

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Kv2.1 (KCNB1) (NM_004975) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Kv2.1 (KCNB1) (NM_004975) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Kv2.1

Synonyms: DEE26; DRK1; Kv2.1

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Sgfl-Mlul

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC224667).

Sequence:

Restriction Sites: Cloning Scheme:

Cloning sites used for ORF Shuttling:

Sgf 1 ORF Mlu 1

--- GCG ATC GCC ATG --- // --- NNN ACG CGT ---



 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_004975

ORF Size: 2574 bp



Kv2.1 (KCNB1) (NM_004975) Human Tagged Lenti ORF Clone - RC224667L3

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 004975.2</u>

RefSeq Size:3756 bpRefSeq ORF:2577 bpLocus ID:3745

 UniProt ID:
 Q14721

 Cytogenetics:
 20q13.13

Domains: BTB, K tetra, Kv2channel, ion trans

Protein Families: Druggable Genome, Ion Channels: Potassium, Transmembrane

Protein Pathways: Taste transduction

MW: 95.7 kDa

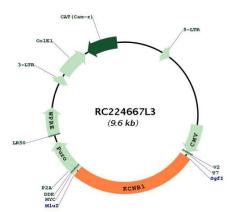
Gene Summary: Voltage-gated potassium (Kv) channels represent the most complex class of voltage-gated ion

channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in Drosophila, and each has been shown to have human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shab-related subfamily. This member is a delayed rectifier potassium channel and its activity is modulated by some other family

members. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC224667L3