

## Product datasheet for RC224604L2

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### Kv2.2 (KCNB2) (NM\_004770) Human Tagged Lenti ORF Clone

#### Product data:

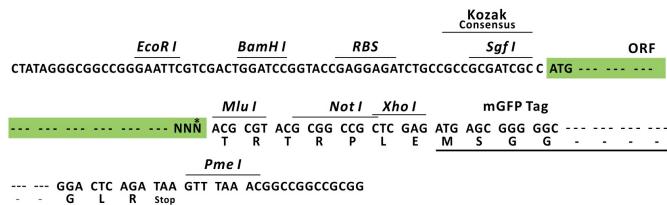
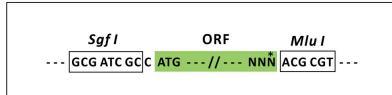
Product Type:	Expression Plasmids
Tag:	mGFP
Symbol:	Kv2.2
Synonyms:	KV2.2
Mammalian Cell	None
Selection:	
Vector:	pLenti-C-mGFP (PS100071)
E. coli Selection:	Chloramphenicol (34 ug/mL)

**ORF Nucleotide Sequence:** The ORF insert of this clone is exactly the same as(RC224604).

**Restriction Sites:** Sgfl-Mlul

#### Cloning Scheme:

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF.

**ACCN:** NM\_004770

**ORF Size:** 2733 bp



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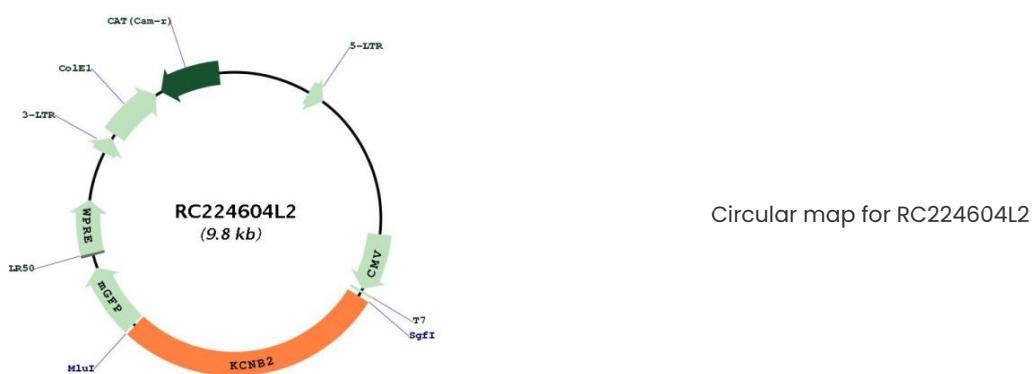
This product is to be used for laboratory only. Not for diagnostic or therapeutic use.

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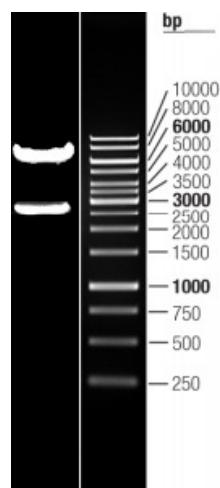
<b>OTI Disclaimer:</b>	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in <i>E. coli</i> are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.
	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u><a href="#">NM_004770.2</a></u>
<b>RefSeq Size:</b>	3597 bp
<b>RefSeq ORF:</b>	2736 bp
<b>Locus ID:</b>	9312
<b>UniProt ID:</b>	<u><a href="#">Q92953</a></u>
<b>Cytogenetics:</b>	8q21.11
<b>Domains:</b>	BTB, K_tetra, Kv2channel, ion_trans
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>MW:</b>	102.4 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. The gene is expressed in gastrointestinal smooth muscle cells. [provided by RefSeq, Jul 2008]

**Product images:**

Circular map for RC224604L2



Double digestion of RC224604L2 using Sgfl and MluI