

## Product datasheet for **RC222096L4V**

### KCNQ2 (NM\_004518) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	KCNQ2 (NM_004518) Human Tagged ORF Clone Lentiviral Particle
Symbol:	KCNQ2
Synonyms:	BFNC; DEE7; EBN; EBN1; ENB1; HNSPC; KCNA11; KV7.2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_004518
ORF Size:	2532 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC222096).
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. <a href="#">More info</a>
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:	<a href="#">NM_004518.4</a>
RefSeq Size:	3167 bp
RefSeq ORF:	2535 bp
Locus ID:	3785
UniProt ID:	<a href="#">O43526</a>
Cytogenetics:	20q13.33
Domains:	KCNQ_channel, ion_trans
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane



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**MW:** 93.1 kDa

**Gene Summary:** The M channel is a slowly activating and deactivating potassium channel that plays a critical role in the regulation of neuronal excitability. The M channel is formed by the association of the protein encoded by this gene and a related protein encoded by the KCNQ3 gene, both integral membrane proteins. M channel currents are inhibited by M1 muscarinic acetylcholine receptors and activated by retigabine, a novel anti-convulsant drug. Defects in this gene are a cause of benign familial neonatal convulsions type 1 (BFNC), also known as epilepsy, benign neonatal type 1 (EBN1). At least five transcript variants encoding five different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]