

Product datasheet for **RC219793L2V**

KCNA5 (NM_002234) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	KCNA5 (NM_002234) Human Tagged ORF Clone Lentiviral Particle
Symbol:	KCNA5
Synonyms:	ATFB7; HCK1; HK2; HPCN1; KV1.5; PCN1
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_002234
ORF Size:	1839 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC219793).
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:	NM_002234.2
RefSeq Size:	2865 bp
RefSeq ORF:	1842 bp
Locus ID:	3741
UniProt ID:	P22460
Cytogenetics:	12p13.32
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
MW:	67 kDa



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Gene Summary:

Potassium 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, shaker-related subfamily. This member contains six membrane-spanning domains with a shaker-type repeat in the fourth segment. It belongs to the delayed rectifier class, the function of which could restore the resting membrane potential of beta cells after depolarization and thereby contribute to the regulation of insulin secretion. This gene is intronless, and the gene is clustered with genes KCNA1 and KCNA6 on chromosome 12. Defects in this gene are a cause of familial atrial fibrillation type 7 (ATFB7). [provided by RefSeq, May 2012]