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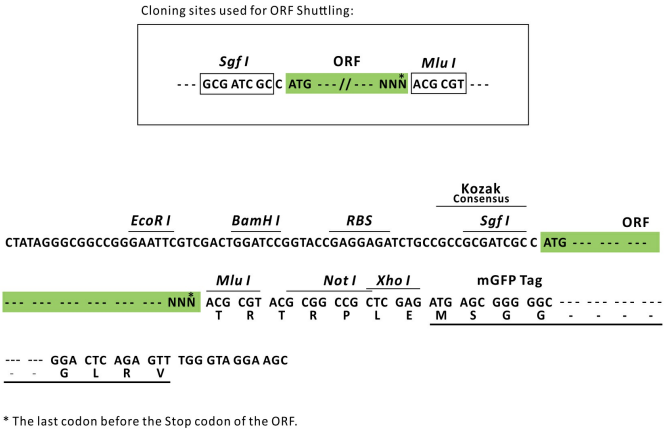
Product datasheet for RC219793L4

KCNA5 (NM_002234) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNA5 (NM_002234) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	KCNA5
Synonyms:	ATFB7; HCK1; HK2; HPCN1; KV1.5; PCN1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC219793).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	



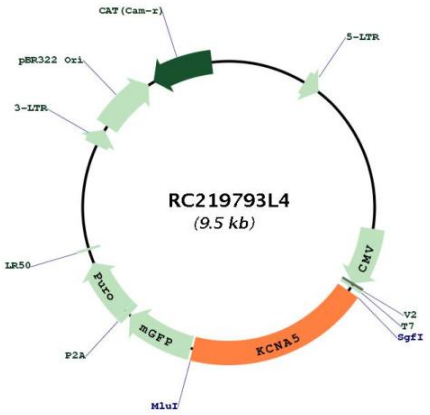
ACCN:	NM_002234
ORF Size:	1839 bp

View online »

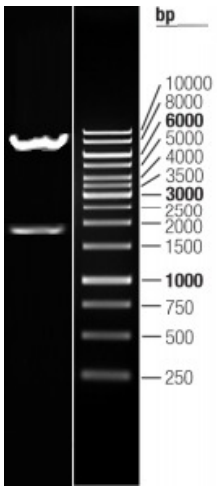
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com 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. 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:	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

Gene Summary: Potassium channels represent the most complex class of voltage-gated ino 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]

Product images:



Circular map for RC219793L4



Double digestion of RC219793L4 using SgfI and MluI