

Product datasheet for RC210365

KCNJ1 (NM_153767) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNJ1 (NM_153767) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNJ1
Synonyms:	KIR1.1; ROMK; ROMK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210365 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAATGCTTCCAGTCGGAATGTGTTTGACACGTTGATCAGGGTGTGACAGAAAGTATGTTCAAACATC
TTCGAAATGGGTCGTCCTCGCTTTTTGGGCATTCTCGGCAAAGAGCAAGGCTAGTCTCAAAGATGG
AAGGTGCAACATAGAATTTGGCAATGTGGAGGCACAGTCAAGGTTTATATCTTTGTGGACATCTGGACA
ACGGTACTTGACCTCAAGTGGAGATACAAAATGACCATTTTCATCACAGCCTTCTGGGGAGTTGGTTTT
TCTTTGGTCTCCTGTGGTATGCAGTAGCGTACATTCACAAAGACCTCCCGAATTCATCCTTCTGCCAA
TCACACTCCCTGTGTGGAGAATTAATGGCTTGACCTCAGCTTTTCTGTTTTCTCTGGAGACTCAAGTG
ACCATTGGATATGGATTAGGTGTGTGACAGAACAGTGTGCCACTGCCATTTTTCTGCTTATCTTTCACT
CTATACTTGGAGTTATAATCAATCTTTTCATGTGTGGGGCCATCTTAGCCAAGATCTCCAGGCCAAAAA
ACGTGCCAAGACCATTACGTTACGAAGAACGCAGTGCATCAGCAAACGGGGAGGGAAGCTTTGCCTCCTA
ATCCGAGTGGCTAATCTCAGGAAGAGCCTTCTTATTGGCAGTCACATTTATGAAAGCTTCTGAAGACCA
CAGTCACTCCTGAAGGAGAGACCATTATTTGGACCAGATCAATATCAACTTTGTAGTTGACGCTGGGAA
TGAAAATTTATCTTTCATCTCCCATTTGACAATTTACCATGTATTGATCACAACAGCCCTTTCTCCAC
ATGGCAGCGGAGACCCCTTCCAGCAGGACTTTGAATTAGTGGTGTGTTTTAGATGGCACAGTGGAGTCCA
CCAGTGCTACCTGCCAAGTCCGGACATCCTATGTCCCAGAGGAGGTGCTTTGGGGCTACCGTTTTGCTCC
CATAGTATCCAAGACAAAGGAAGGGAAATACCGAGTGGATTTCCATAACTTTAGCAAAGACAGTGGAAAGTG
GAGACCCCTCACTGTGCCATGTGCCTTTTAATGAGAAAGATGTTAGAGCCAGGATGAAGAGAGGCTATG
ACAACCCCAACTTCATCTGTGAGAAGTCAATGAAACAGATGACACCAAATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC210365 protein sequence
Red=Cloning site Green=Tags(s)

MNASSRNVFDLIRVLTESMFKHLRKWVTRFFGHSRQRARLVSKDGRCNIEFGNVEAQSRIFFVDIWT
 TVLDLKWRYKMTIFITAFLGSWFFGLLWYAVAYIHKDLPEFHPSANHTPCVENINGLTS AFLFSLETQV
 TIGYGFRVCVTEQCATAIFLLIFQSI L GVIINSFMCGAILAKISRPKRAKTITFSKNAVISKRGKLCLL
 IRVANLRKSL L I GSHIYGKLLKTTVTPEGETIILDQININ FVVDAGNENLFFISPLTIYHVIDHNSPFFH
 MAAETLLQQDFELVVFLDGTVESTSATCQVRTSYVPEEVLWGYRFAPIVSKTKEGKYRVDFHNSKTVEV
 ETPHCAMCLYNEKDVRARMKRGYDNPFI L SEVNETDDTKM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6584_d03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_153767

ORF Size: 1176 bp

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 Size: 2760 bp

RefSeq ORF: 1119 bp

Locus ID: 3758

UniProt ID: [P48048](#)

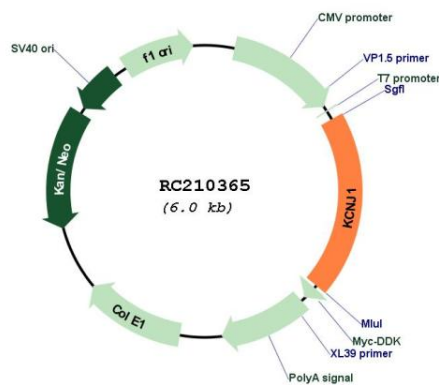
Cytogenetics: 11q24.3

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

MW: 44.8 kDa

Gene Summary: Potassium channels are present in most mammalian cells, where they participate in a wide range of physiologic responses. The protein encoded by this gene is an integral membrane protein and inward-rectifier type potassium channel. It is activated by internal ATP and probably plays an important role in potassium homeostasis. The encoded protein has a greater tendency to allow potassium to flow into a cell rather than out of a cell. Mutations in this gene have been associated with antenatal Bartter syndrome, which is characterized by salt wasting, hypokalemic alkalosis, hypercalciuria, and low blood pressure. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC210365