

Product datasheet for **SC123939**

KCNJ1 (NM_153767) Human Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | KCNJ1 (NM_153767) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | KCNJ1 |
| Synonyms: | KIR1.1; ROMK; ROMK1 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL4</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| Fully Sequenced ORF: | >NCBI ORF sequence for NM_153767, the custom clone sequence may differ by one or more nucleotides |

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ATGTTCAAACATCTTCGGAAATGGGTCGTCACCTCGCTTTTTGGGCATTCTCGGCAAAGCAAGGCTAG
TCTCAAAGATGGAAGGTGCAACATAGAATTTGGCAATGTGGAGGCACAGTCAAGGTTTATATTCTTTGT
GGACATCTGGACAACGGTACTTGACCTCAAGTGGAGATACAAAATGACCATTTTCATCACAGCCTTCTTG
GGGAGTTGGTTTTTCTTTGGTCTCCTGTGGTATGCAGTAGCGTACATTACAAAAGACCTCCCGAATTCC
ATCCTTCTGCCAATCACACTCCCTGTGTGGAGAATTAATGGCTTGACCTCAGCTTTTCTGTTTTCTCT
GGAGACTAAGTGACCATTGGATATGGATTGAGTGTGTGACAGAACAGTGTGCCACTGCCATTTTCTG
CTTATCTTTCAGTCTATACTTGGAGTTATAATCAATTCTTTCATGTGTGGGGCCATCTTAGCCAAGATCT
CCAGGCCCAAAAACGTGCCAAGACCATTACGTTTCAGCAAGAACGCAAGTATCAGCAAACGGGGAGGGAA
GCTTTGCCTCCTAATCCGAGTGGCTAATCTCAGGAAGAGCCTTCTTATTGGCAGTCACATTTATGAAAAG
CTTCTGAAGACCACAGTCACTCCTGAAGGAGAGACCATTATTTGGACCAGATCAATATCAACTTTGTAG
TTGACGCTGGGAATGAAAATTTATTTCTCATCTCCCCATTGACAATTTACCATGTCATTGATCACAACAG
CCCTTTCTCCACATGGCAGCGGAGACCCTTCTCCAGCAGGACTTTGAATTAGTGGTGTTTTTAGATGGC
ACAGTGGAGTCCACCAGTGCTACCTGCCAAGTCCGGACATCCTATGTCCCAGAGGAGGTGCTTTGGGGCT
ACCGTTTTGCTCCCATAGTATCCAAGACAAAGGAAGGAAATACCGAGTGGATTTCCATAACTTTAGCAA
GACAGTGAAGTGGAGACCCCTCACTGTGCCATGTGCCTTTATAATGAGAAAGATGTTAGAGCCAGGATG
AAGAGAGGCTATGACAACCCCACTTTCATCTTGTGAGAAGTCAATGAAACAGATGACACCAAAATGTAA
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| 5' Read Nucleotide Sequence: | >OriGene 5' read for NM_153767 unedited GCATTCGGCACCAGCCGGTCTGAGCTGGCCACAGACTCATAAAATCAACAGGGCCTCGG GTACCCTCACCCAGCATATCCAACTCTTGATCAAAGGTGCAGGGACTTGCTCACATCG AGAATCTGGTTGCTTTCTTGGAGACCAAGAAAATGAGTTTTTGTCTACATTTACTCCA GCAATCCATGAGGACTTTATAGGAATTTTGACCATTCTGAATGGATACATTTGGATTTCT TCAACATTTGTTGAGCTTCTAATGACTGTTGTGACAATTGCTCTATACCAGTGAATGCC AACTGTTTATCTCTGCTCTGAACAGGTTTCTTCTACTGTGCCTTCATCCCCATCCTGG GCCTTGACAAAGACAGTGTGACAAGTTCTGAGCCCCACAGGTGGAATCCCAAACCAAGCA GCTCTTGCTGGTCACCCCAAGATCTACTTATACATGAAGTTTTGAAAATCATCTCTGAA CCTCTTCTGACAGAGATCAGGGTGTGACAGAAAGTATGTTCAAACATCTTCGAAATGG GTCGCTACTCGTTTTTTGGGCATTCTCGGCAAAGAGCAAGGCTAGTCTCAAAGATGNA AGGTGCAACATAGAATTTGGAATGTGGAGCACAGTCAGGTTTATATTCTTGACATCTG GACACGGTACTGANCTAAGTGAGATACAAATGACATTTTATCACAGCTCTTGAGAGTGT TTTTCTGCTCCGGTATGAATACGTACATCCAAGACG |
| 3' Read Nucleotide Sequence: | >OriGene 3' read for NM_153767 unedited GGTGGCAACTTCCAGGCCAGGAGGCACTGGGGAGGGTGCAGGGATGCCACCCGGGA TCTGTTACAGAAACAGCTATGACCGCGCCGAATCTAGAGTCGAGTTTTTTTTTTGGTT TTTTTTTTTTTTTTTTTTTTTCCACAGTTTCAGAAAATTTACTATTTTAAATCAACACACT GAAAACATTTTGATTCTAAGCAGCTTTGAGTACCAGTTTTTTTCCAGGACACATTCCGA ATGATGCAGGTGGGGATCTGAAAAAACTTTTACAGTAAAATTTCCCTCAAGGTCGAG CCTTCCATAACCTGGCCCTTTAAGAAAAATGGCTCTCCAGGAAAAGAAGACATAATAAC CTTTTGGCTGTGGGGTCCATCCATTTCTCTCTTTCCACTTCTTTTAGAAATAG CATTCCAGTTCAAACCTAGGGGGGGGAACACATGAAACTGTTTCTTCTAGGTGCATTA ATGATACATTCCTCTCTACTGACTTTGACCTTCCAACTCCTCATTGCTGTCTTTGAAG AGCAGGGAAAATGCTCTTTATAACCGGATTTAATGCCCTTTAAGGCCCTTCAATTCGAG TTGGAGGAAAATTTCTCCCCCTTTTAAATTAATAAACTTTTCGGTCTTGAGGAGGGTTT CCTTCAAGATTTCTTGGGCATTTTTTACCTTGGGTACCTTTCAACTTGAAAAGCTTAG GCCCAATTTGGTCTTTGGGAAACCTTTTTGGGCCAGAAGGGGTGTTTTCTCCCT |
| Restriction Sites: | Please inquire |
| ACCN: | NM_153767 |
| Insert Size: | 3100 bp |
| OTI Disclaimer: | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). |
| 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: | <ol style="list-style-type: none"> 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: | <u>NM_153767.1</u> , <u>NP_722451.1</u> |

RefSeq Size: 2749 bp
RefSeq ORF: 1119 bp
Locus ID: 3758
UniProt ID: [P48048](#)
Cytogenetics: 11q24.3

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

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]

Transcript Variant: This variant (5, also known as rom-k5) differs in the 5' UTR and coding region compared to variant 1. The resulting isoform (b) is shorter at the N-terminus than isoform a. Variants 2, 4 and 5 all encode isoform b but differ in their 5' UTRs.