

Product datasheet for MR226110

Kcnj5 (NM_010605) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnj5 (NM_010605) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcnj5
Synonyms:	GIRK4; Kir3.4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR226110 representing NM_010605 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGGTGATTCTAGGAATGCTATGAATCAAGACATGGAGATAGGAGTCACTTCCCAGGACCACAAGA
AGATTCCAAACAGGCTCGGGATTACATCCCCATTGCCACAGACCCGACCCGCTGCTGACAGAAGGCAA
GAAGCCACGCCAGCGCTACATGGAGAAGACTGGCAAGTCAATGTACACCACGGCAATGTTCAAGAAACC
TACCGCTACCTAAGTGACCTCTTACCACCTGGTGGACCTCAAATGGCGCTTCAACCTTCTGGTCTTCA
CCATGGTCTACACCATCACCTGGCTGTTCTTTGGCTTCATTTGGTGGCTCATTGCTTATGTCGGAGGTGA
TCTGGATCACGTGGGTGACCAAGAGTGGATCCCTTGTGTTGAAAACCTTAGCGGCTTGTATCTGCTTTC
CTGTTCTCCATCGAGACAGAAACAACATTGGGTATGGCTTCAGAGTCATTACAGAGAAGTGCCAGAAG
GGATCATACTCCTTCTGGTGCAGGCCATTCTGGGCTCGATTGTTAATGCCTTCATGGTGGGGTGCATGTT
TGTAAGATCAGCCAGCCAAAGAAGAGAGCAGAGACCCTAATGTTTTCCAACAATGCCGTCATCTCCATG
CGGGATGAGAAGCTGTGCCTCATGTTCCGGGTAGGGGACCTCCGAACTCCCACATCGTGGAGGCCCTCCA
TCCGTGCCAAGCTTATCAAGTCCCGCAGACCAAGAAGGAGAATTCATCCCTTGAACCCAGACCCGACAT
TAATGTGGGCTTTGACACTGGTACGACCGCCTCTTCTGGTCTCCCACTCATCATCCCACGAGATC
AACGGAAGAGCCCTTTTGGGAGATGTCTCGTCTCAACTGGAACAGGAAGATTGCAAGTTGTGGTCA
TACTAGAAGGAATGGTAGAAGCAACAGGCATGACTTGCCAAGCACGGAGCTTTACATGGATACAGAGGT
GCTCTGGGGTCAACGATTACACCAAGTTCTCACCTTGGAAAAGGGCTTCTATGAGGTGGACTACAACACT
TTCCATGACACCTATGAGACCAACACACCCAGTTGCTGTGCCAAGGAGCTGGCGGAGATGAAGCGGAGCG
GTCGGCTCCTCCAGTACCTTCCAGTCTCCCTTGCTTGGGGGCTGTGCTGAGGCTGGGAACGAAGCTGA
GGCCGAGAAGGATGAAGAGGGTGAAGCCCAATGGACTGAGTGTGCCAGGCCACCAGGGGCTCAATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR226110 representing NM_010605
 Red=Cloning site Green=Tags(s)

MAGDSRNAMNQDMEIGVTSQDHKKIPKQARDYIPIATDRTRLLTEGKKPRQRYMEKTGKCNVHHGNVQET
 YRYLSDLFTLLVDLKWRFNLLVFTMYYITLWFFGFIWWLIAYVRGDLDHVGDQEWIPCVENLSGFVSAF
 LFSIETETTIGYGRVITEKCEGIIILLVQAILGSIVNAFMVGC MFVKISQPKKRAETLMFSNNAVISM
 RDEKLCMLFRVGDRLRNSHIVEASIRAKLIKSRQKEGEFIPLNQTDINVGFD TGDDRLFLVSPLIISHEI
 NEKSPFWEMSRAQLEQEEFEVVVILEGMVEATGMTQCQARSSYMDTEVLWHRFTPVLTLEKGFYEVDYNT
 FHDTYENTPSCCAKELAE MKRSGRLLQYLPSPPLLGGCAEAGNEAEAEKDEEGEPNGLSVSQATR GSM

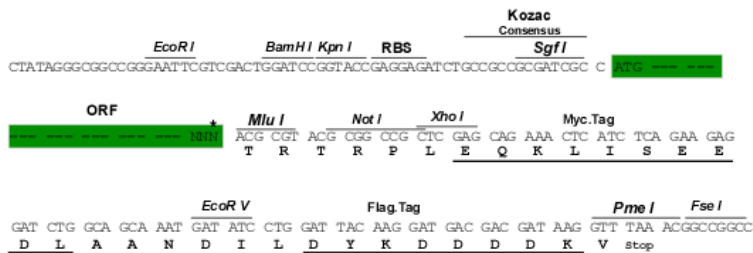
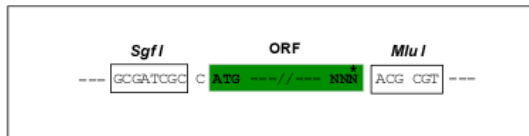
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9018_b09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_010605

ORF Size: 1257 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: [NM_010605.5](#)

RefSeq Size: 4496 bp

RefSeq ORF: 1260 bp

Locus ID: 16521

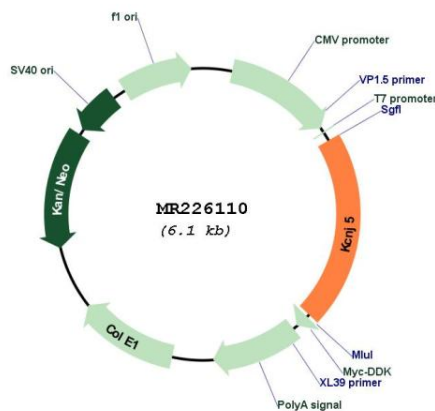
UniProt ID: [P48545](#)

Cytogenetics: 9 17.65 cM

MW: 48.1 kDa

Gene Summary: This potassium channel is controlled by G proteins. Inward rectifier potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it. Their voltage dependence is regulated by the concentration of extracellular potassium; as external potassium is raised, the voltage range of the channel opening shifts to more positive voltages. The inward rectification is mainly due to the blockage of outward current by internal magnesium. Can be blocked by external barium.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR226110