

Product datasheet for MR229809

Kcnj16 (NM_001252209) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnj16 (NM_001252209) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcnj16
Synonyms:	6430410F18Rik; AI132396; Kir5.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR229809 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCTATTACGGAAGTAGCTACAGGATCGTCAATGTGGACTCCAAATATCCAGGCTATCCTCCAGAGC
ATGCCATCGCTGAGAAGAGAAGACAAGAAGGCGCTTGCTCCACAAGATGGCAGCTGTAATGTGTACTT
TAAACACATTTTTGGAGAATGGGGAGCTACATGGTTGATTTTTACCCTCTGTGGATACCAAGTGG
CGCCATATGTTTCGTAATTTTTCTGTCTTACATTCTCTCCTGGTTGATTTGGCTCCATTTTTGGC
TCATAGCCTTTCATCACGGAGACCTATTAAGCGATCCAGATATCACCCCTGTGTTGACAACGTGCATTC
ATTTACGGCTGCATTTTTATTCTCCTGGAGACCCAGACCACCATTTGGATACGGTTACCGCTGTGTCAAC
GAAGAGTGCTCTGTGGCTGACTGACAGTGATCCTTCAGTCCATCCTCAGCTGCATCATAAACACCTTCA
TCATTGGAGCAGCCTTGGCAAAGATGGCAACTGCCCGGAAGAGAGCCAGACCATACGCTTCAGCTATTT
TGCCCTCATTGGTATGAGAGACGGGAAGCTTGCCTCATGTGGCGCATAGGTGACTTCCGACCAAACCAT
GTGGTAGAGGGCACGGTGAGAGCCCACTTCTGCGCTATTCAGAAGACAGTGAAGGGAGGATGACGATGG
CGTTTAAAGACCTCAAACCTCGTCAATGACCAGATAATCCTGGTAACTCCAGTGACTATTGTCATGAAAT
TGACCATGAGAGCCCTCTGTATGCCCTTGACCGCAAGGCAGTGGCCAAAGATAATTTTCGAGATTCTGGT
ACATTTATTTACTGGTGATTCCACTGGGACATCCCACAGTCCAGAAGTTCTACATCCCAGAGAAA
TTCTCTGGGGCCACAGGTTTCATGATGATTGGAAGTGAAGAGAAAGTACTACAAGGTGAACTGCTTGCA
GTTTGAAGGAAGCGTGGAAGTCTACGCCCTTTTGCAGTGCCAAACAACCTGGACTGGAAGGACCAACA
CTCAACAACCTGGAGAAAACGTCCCTGCCGAGGATCCTGCAATTCTGACACCAACACCAGGAGCGGT
CCTTCAGCGCAGTTGCCGTGGTGAAGCAGCTGTGAGAACCAGAGGAGACCGTCTGTCCCCACAAGATGA
ATGTAAGGAGATGCCCTATCAGAAAGCCCTCTGACTTTAAATAGGATCTCCATGGAATCCCAGATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR229809 protein sequence
 Red=Cloning site Green=Tags(s)

MSYYGSSYRIVNVDSKYPGPPEHAIAEKRRARRRLLHKDGCNVYFKHIFGEWGSYMDIFTLLVDTKW
 RHMVFVIFSLSYILSWLIFGSIWLI AFHHGDLSDPDI TPCVDNVHSFTA AFLFSLETQTTIGYGYRCVT
 EECSSVAVLTVILQSI LSCIINTFI IGAALAKMATARKRAQTIRFSYFALIGMRDGKLC LMWRIGDFRPNH
 VVEGTVRAQLLRYS EDSGRMTMAFKDLKLVNDQIILVTPVTIVHEIDHESPLYALDRKAVAKDNFEILV
 TFIYTG DSTGTS HQSRSSYIPREILWGH RFDVLEVKRKYKVNCLQFEGSVEVYAPFCSAKQLDWK DQQ
 LNNLEK TSPARGSCNSD TNRRRSF SAVAVVSSCENPEETVLSPQDECKEMPYQKALLTLNRI SMESQM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001252209

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_001252209.2](#), [NP_001239138.1](#)

RefSeq Size: 3685 bp

RefSeq ORF: 1260 bp

Locus ID: 16517

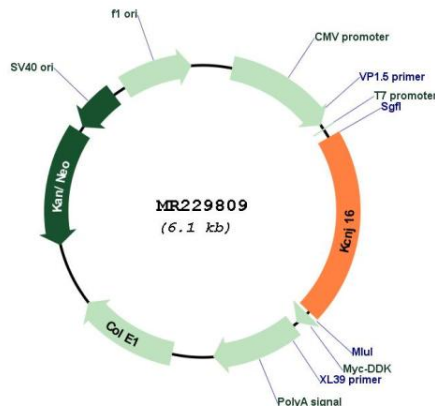
UniProt ID: [Q9Z307](#)

Cytogenetics: 11 75.01 cM

MW: 48 kDa

Gene Summary: 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. KCNJ16 may be involved in the regulation of fluid and pH balance. In the kidney, together with KCNJ10, mediates basolateral K(+) recycling in distal tubules; this process is critical for Na(+) reabsorption at the tubules.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR229809