

## Product datasheet for MR229810

### Kcnj16 (NM\_001252210) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnj16 (NM_001252210) 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:	>MR229810 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCTATTACGGAAGTAGCTACAGGATCGTCAATGTGGACTCCAAATATCCAGGCTATCCTCCAGAGC  
ATGCCATCGCTGAGAAGAGAAGACAAGAAGGCGCTTGCTCCACAAGATGGCAGCTGTAATGTGTACTT  
TAAACACATTTTTGGAGAATGGGGAGCTACATGGTTGATTTTTACCCTCTGTGGATACCAAGTGG  
CGCCATATGTTTCGTAATTTTTCTGTCTTACATTCTCTCTGGTTGATTTGGCTCCATTTTTGGC  
TCATAGCCTTTCATCACGGAGACCTATTAAGCGATCCAGATATCACCCCTGTGTTGACAACGTGCATTC  
ATTTACGGCTGCATTTTTATTCTCCCTGGAGACCCAGACCACCATTTGGATACGGTTACCGCTGTGTCA  
GAAGAGTGCTCTGTGGCTGACTGACAGTGATCCTTCAGTCCATCCTCAGCTGCATCATAAACACCTTCA  
TCATTGGAGCAGCCTTGCCAAAGATGGCAACTGCCCGGAAGAGAGCCAGACCATACGCTTCAGCTATTT  
TGCCCTCATTGGTATGAGAGACGGGAAGCTTGCCTCATGTGGCGCATAGGTGACTTCCGACCAAACCAT  
GTGGTAGAGGGCACGGTGAGAGCCCACTTCTGCGCTATTCAGAAGACAGTGAAGGGAGGATGACGATGG  
CGTTTAAAGACCTCAAACCTCGTCAATGACCAGATAATCCTGGTAACTCCAGTGACTATTGTCATGAAAT  
TGACCATGAGAGCCCTCTGTATGCCCTTGACCGCAAGGCAGTGGCCAAAGATAATTTGAGATTCTGGTG  
ACATTTATTTACTGGTGATTCCACTGGGACATCCCACAGTCCAGAAGTTCTACATCCCAGAGAAA  
TTCTCTGGGGCCACAGGTTTCATGATGATTGGAAAGTGAAGAGAAAGTACTACAAGGTGAACTGCTTGCA  
GTTTGAAGGAAGCGTGAAGTCTACGCCCTTTTGCAGTGCCAAACAACCTGGACTGGAAGGACCAACA  
CTCAACAACCTGGAGAAAACGTCCCTGCCGAGGATCCTGCAATTCTGACACCAACACCAGGAGCGGT  
CCTTCAGCGCAGTTGCCGTGGTGAGCAGCTGTGAGAACCAGAGGAGACCGTCTGTCCCCACAAGATGA  
ATGTAAGGAGATGCCCTATCAGAAAGCCCTCTGACTTTAAATAGGATCTCCATGGAATCCAGATG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR229810 protein sequence  
 Red=Cloning site Green=Tags(s)

MSYYGSSYRIVNVDSKYPGPPEHAIAEKRRARRRLLHKDGCNVYFKHIFGEWGSYMDIFTLLVDTKW  
 RHMVFVIFSLSYILSWLIFGSIWLI AFHHGDLSDPDI TPCVDNVHSFTA AAF LFSLETQTTIGYGYRCVT  
 EECSSVAVLTVILQSI LSCIINTFI IGAALAKMATARKRAQTIRFSYFALIGMRDGKLC LMWRIGDFRPNH  
 VVEGTVRAQLLRYS EDSGRMTMAFKDLKLVNDQIILVTPVTIVHEIDHESPLYALDRKAVAKDNFEILV  
 TFIYTG DSTGTS HQSRSSYIPREILWGHRFHDVLEVKRKYKVNCLQFEGSVEVYAPFCSAKQLDWK 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\_001252210

**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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_001252210.2](#), [NP\\_001239139.1](#)

**RefSeq Size:** 3652 bp

**RefSeq ORF:** 1260 bp

**Locus ID:** 16517

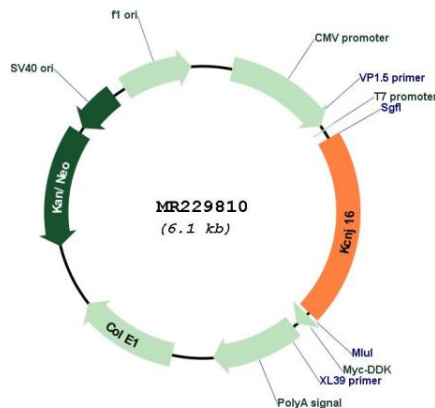
**UniProt ID:** [Q9Z307](#)

**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 MR229810