

## Product datasheet for **MR227141**

### **Kcnj3 (NM\_008426) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Kcnj3 (NM_008426) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcnj3
Synonyms:	GIRK-1; GIRK1; Kcnf3; Kir3.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR227141 representing NM\_008426  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTCTGCACTCCGAAGGAAATTTGGGGACGATTACCAGGTAGTGACCACTTCGTCGAGCGGTTCCGGCT  
 TACAGCCTCAGGGGCCAGGACAGGGCCCGCAGCAGCAGCTGGTGCCCAAGAAGAAACGGCAGCGGTTTCGT  
 GGACAAGAACGGCCGGTGAATGTGACGATGGTAACCTGGGCAGCGAGACCAGTCGCTACCTTTTCGGAC  
 CTCTTCACTACCCTGGTGGATCTCAAGTGGCGTTGGAACCTCTTTATCTTCATCCTCACCTACACCGTGG  
 CCTGGCTCTTCATGGCGTCCATGTGGTGGGTGATCGTTATACCCGGGGCGACCTGAACAAAGCCCATGT  
 CGGCAACTACACTCCCTGTGTGGCAATGTCTATAACTCCCCTCGCTTCTCTTCTTCATCGAGACC  
 GAGGCCACCATCGGCTATGGCTACCGCTACATCACAGATAAGTCCCCGAGGGCATCATCTCTTCTCTCT  
 TCCAGTCCATCCTGGCTCCATCGTGGACGCTTTCCTCATCGGCTGCATGTTTCATCAAGATGTCCCAGCC  
 CAAAAAGCGCGCCGAGACCCTCATGTTTAGCGAGCATGCGGTTATCTCCATGAGGGACGGAAAACACTCACT  
 CTATGTTCCGGGTGGGCAACCTGCGCAACAGCCACATGGTCTCCGCGCAGATCCGCTGCAAGCTGCTCA  
 AATCTCGGCAGACACCTGAGGGTGAATTCCTTCCCCTTGACCAACTTGAAGTGGATGTAGGTTTTAGTAC  
 AGGGGCCGATCAACTTTTTCTGTGTCCCTCTCACAATTTGCCACGTGATCGATGCCAAAAGCCCTTC  
 TATGACCTATCCCAGCGAAGCATGCAAACCTGAACAGTTTCGAGGTTGTCGTCATCCTGGAAGGCATTTGG  
 AAACCACAGGAATGACTTGTCAAGCTCGAACATCATACACAGAGGACGAAGTGTCTTGGGGTCATCGTTT  
 TTTCCCTGTAATTTCTTTAGAAGAAGGATCTTTAAAGTCGATTACTCCCAGTCCATGCAACCTTTGAA  
 GTTCCAACCCCTCCTTACAGCGTAAAGAGCAGGAGGAAATGCTTCTCATGCTCCCTTTAATAGCAC  
 CAGCCATAACCAACAGCAAAGAAAGACACAATTTCTGGAGTGTTTAGATGGACTAGATGACATTAGCAC  
 AAAACTTCCATCGAAGCTGCAGAAAATTACGGGGAGAGAAGACTTCCCAAAAAACTTCTGAGAATGAGT  
 TCTACAACCTCAGAAAAAGCCTATAGTTTGGGTGATTTGCCCATGAAACTCCAACGAATAAGTTCAGTTC  
 CTGGCAACTCGGAAGAAAAACTGGTTTCTAAAACCACCAAGATGTTATCTGATCCCATGAGCCAGTCTGT  
 GGCCGATTTGCCACCAAAGCTTCAAAGATGGCTGGAGGACCTACCAGGATGGAAGGAAATCTTCCAGCC  
 AAATAAGAAAAATGAACTCTGACCGTTTACA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR227141 representing NM\_008426  
 Red=Cloning site Green=Tags(s)

MSALRRKFGDDYQVVTTSSSGSLQPQPGQGPQQQLVPKKRQRFVDKNGRCNVQHNLGSETSRYLSD  
 LFTTLVDLKWVNLFIIFILTYTVAWLFMASMWWIAYTRGDLNKAHVGNYPVCVANVYVNFPSAFLFFIET  
 EATIGYGYRYITDKCEGIIILFLFQSILGSI VDAFLIGCMFIKMSQPKKRAETLMFSEHAVISMRDGKLT  
 LMFVRVGNLRNSHMVSAQIRCKLLKSRQTPEGEFLPLDQLELDVGFSTGADQLFLVSPILTICHVIDAKSPF  
 YDLSQRSMQTEQFEVVVILEGIVETGTMTCQARTSYTEDEVLWGHRRFPVISEEGFFKVDYSQFHATFE  
 VPTPPYSVKEQEEMLLMSSPLIAPAITNSKERHNSVECLDGLDDISTKLPKSKLQKITGREDFPKLLRMS  
 STTSEKAYSLGDLPMKLQRISVPGNSEEKL VSKTTKMLSDPMSQSVADLPPKLQKMAGGPTRMEGNLPA  
 KLRKMNSDRFT

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9016\\_d06.zip](https://cdn.origene.com/chromatograms/mm9016_d06.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_008426

**ORF Size:** 1503 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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).

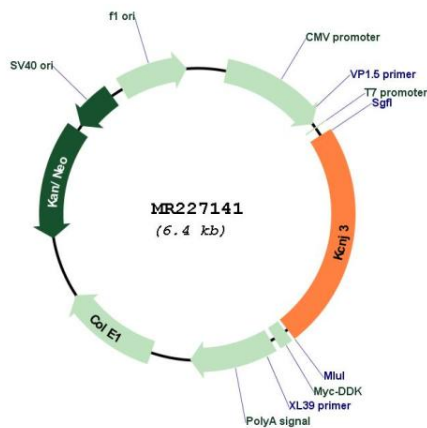
**Reconstitution Method:**

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\\_008426.2](#)  
**RefSeq Size:** 1679 bp  
**RefSeq ORF:** 1506 bp  
**Locus ID:** 16519  
**UniProt ID:** [P63250](#)  
**Cytogenetics:** 2 C1.1  
**MW:** 57 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. This receptor plays a crucial role in regulating the heartbeat.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR227141