

Product datasheet for **MG227141**

Kcnj3 (NM_008426) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnj3 (NM_008426) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kcnj3
Synonyms:	GIRK-1; GIRK1; Kcnf3; Kir3.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG227141 representing NM_008426
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTCTGCACTCCGAAGGAAATTTGGGGACGATTACCAGGTAGTGACCACTTCGTCGAGCGGTTCCGGCT
 TACAGCCTCAGGGGCCAGGACAGGGCCCGCAGCAGCAGCTGGTGCCCAAGAAGAAACGGCAGCGGTTTCGT
 GGACAAGAACGGCCGGTGAATGTGACGATGGTAACCTGGGCAGCGAGACCAGTCGCTACCTTTTCGGAC
 CTCTTCACTACCCTGGTGGATCTCAAGTGGCGTTGGAACCTCTTTATCTTCATCCTCACCTACACCGTGG
 CCTGGCTCTTCATGGCGTCCATGTGGTGGGTGATCGCTTATACCCGGGGCGACCTGAACAAAGCCCATGT
 CGGCAACTACACTCCCTGTGTGGCAATGTCTATAACTTCCCCTTCGCCTTCTCTTCTTCATCGAGACC
 GAGGCCACCATCGGCTATGGCTACCGCTACATCACAGATAAGTCCCCGAGGGCATCATCTCTTCTCTCT
 TCCAGTCCATCCTGGCTCCATCGTGGACGCTTTCCTCATCGGCTGCATGTTTCATCAAGATGTCCCAGCC
 CAAAAAGCGCGCCGAGACCTCATGTTTAGCGAGCATGCGGTTATCTCCATGAGGGACGGAAAACACTCACT
 CTATGTTCCGGGTGGGCAACCTGCGCAACAGCCACATGGTCTCCGCGCAGATCCGCTGCAAGCTGCCTCA
 AATCTCGGCAGACACCTGAGGGTGAATTCCTTCCCCTTGACCAACTTGAAGTGGATGTAGGTTTTAGTAC
 AGGGGCCGATCAACTTTTTCTTGTGTCCCTCTCACAATTTGCCACGTGATCGATGCCAAAAGCCCTTTC
 TATGACCTATCCCAGCGAAGCATGCAAACCTGAACAGTTCGAGGTTGTCGTCATCCTGGAAGGCATTTGGG
 AAACCACAGGAATGACTTGTCAAGCTCGAACATCATACACAGAGGACGAAGTGTCTTGGGGTTCATCGTTT
 TTTCCCTGTAATTTCTTTAGAAGAAGGATCTTTAAAGTCGATTACTCCCAGTCCATGCAACCTTTGAA
 GTTCCAACCCCTCTTACAGCGTGAAGAGCAGGAGGAAATGCTTCTCATGTCTCCCCTTAAATAGCAC
 CAGCCATAACCAACAGCAAAGAAAGACACAATTTCTGGAGTGTTAGATGGACTAGATGACATTAGCAC
 AAAACTTCCATCGAAGCTGCAGAAAATTACGGGGAGAGAAGACTTCCCAAAAAACTTCTGAGAATGAGT
 TCTACAACCTCAGAAAAAGCCTATAGTTTGGGTGATTTGCCCATGAAACTCCAACGAATAAGTTCAGTTC
 CTGGCAACTCGGAAGAAAAACTGGTTTCTAAAACCACCAAGATGTTATCTGATCCCATGAGCCAGTCTGT
 GGCCGATTTGCCACAAAGCTTCAAAGATGGCTGGAGGACCTACCAGGATGGAAGGAAATCTTCCAGCC
 AAATAAGAAAAATGAACTCTGACCGTTTCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG227141 representing NM_008426
 Red=Cloning site Green=Tags(s)

MSALRRKFGDDYQVVTSSSGSLQPQGPQGPQQQLVPKKRQRFVDKNGRCNVQHNLGSETSRYLSD
 LFTTLVDLKWVWNLFIILTYTVAWLFMASMWWWIAYTRGDLNKAHVGNYPVCVANVYFSAFLFFIET
 EATIGYGYRYITDKCEGIIILFLFQSILGSIVDAFLIGCMFIKMSQPKKRAETLMFSEHAVISMVDGKLT
 LMFVRVGNLRNSHMVSAQIRCKLLSRQTPGEFLPLDQLELDVGFSTGADQLFLVSPLTICHVIDAKSPF
 YDLSQRSMQTEQFEVVVILEGIVETGTMTCQARTSYTEDEVLWGRHFPVVISLEEGFFKVDYSQFHATFE
 VPTPPYSVKEQEEMLLMSSPLIAPAITNSKERHNSVECLDGLDDISTKLPSKLQKITGREDFPKLLRMS
 STTSEKAYSLGDLPMKLQRISVPGNSEEKLVSKTTKMLSDPMSQSVADLPPKLQKMAGGPTRMEGNLPA
 KLRKMNSDRFT

TRTRPLE - GFP Tag - V

Chromatograms:

https://cdn.origene.com/chromatograms/ja1835_c09.zip

Restriction Sites:

Sgfl-MluI

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 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).

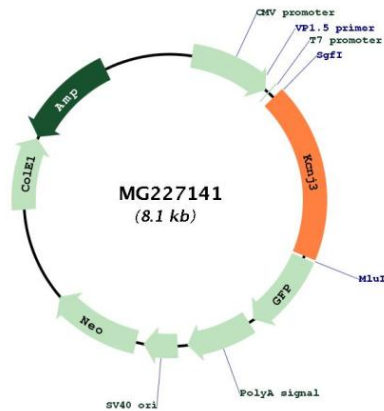
Reconstitution Method:

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

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 MG227141