

Product datasheet for **MG221662**

Kcnj2 (NM_008425) Mouse Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | Kcnj2 (NM_008425) Mouse Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | Kcnj2 |
| Synonyms: | IRK1; Kcnf1; Kir2.1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| ORF Nucleotide Sequence: | >MG221662 representing NM_008425 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCAGTGTGAGAACCAACCGCTACAGCATCGTCTCTTCGGAGGAAGATGGCATGAAGCTGGCCACTA
TGGCAGTTGCCAATGGCTTTGGGAATGGCAAGAGTAAAGTCCATACCCGACAACAGTGCAGGAGCCGCTT
TGTGAAGAAAGATGGTCATTGCAATGTTCAAGTTTCAACGTGGGTGAGAAGGGACAGAGGTACCTGGCA
GACATCTTTACTACCTGTGTCGACATCCGCTGGAGGTGGATGCTGGTTATCTTCTGTCTTGCCTTCGTGC
TCTCCTGGCTGTCTTTGGCTGTGTGTTTTGGTTGATAGCCCTGCTCCATGGGGATCTAGATACTTCTAA
AGTGAGCAAAGCATGCGTGTGAGAGTCAACAGCTTACGCGCTGCCTTCCCTTCTCCATCGAGACCCAG
ACAACCATTGGCTATGGTTTCAGGTGTGTGACAGACGAGTGCCCAATTGCTGTCTTCATGGTGGTATTCC
AGTCAATCGTAGGCTGCATCATTGACGCTTCATCATTGGTGCAGTCATGGCGAAGATGGCAAAGCCAAA
GAAGAGAAATGAGACTCTTGTCTTCAGTCACAATGCTGTGATTGCCATGAGGGATGGCAAACCTGCTTG
ATGTGGAGAGTGGGTAACCTTCGAAAGAGCCACCTTGTTGGAAGCTCATGTCCGGGCACAGCTTCTCAAT
CTAGGATCACTTCAGAAGGGGAGTATATCCCTTTGGACCAGATAGACATCAATGTTGGTTTTGATAGTGG
AATTGACCGCATATTTCTAGTGTCCCCATCACTATCGTTCACGAAATAGATGAAGACAGCCCTTTATAT
GACTTGAGTAAGCAGGACATTGACAATGCAGACTTTGAAATTTGTGCATACTGGAAGGCATGGTGGAGG
CGACTGCCATGACAACCTCAATGCCGAGTTCGTATCTGGCCAATGAAATCTCTGGGGTACCCGCTATGA
GCCAGTGTCTTTGAAGAGAAACACTACTATAAAGTAGACTATTCAAGATTCCATAAGACTTATGAAGTA
CCTAACACCCCTTTGTAGTGCCAGAGACTTAGCAGAGAAGAAATACATCCTTTCAAATGCAAATTCAT
TTTGCTATGAAAATGAAGTTGCCCTAACAAAGCAAAGAGGAAGAGGAGGATAGTGAGAACGGAGTCCCAGA
GAGCACAAGCACAGACTCACCTCCTGGCATAGATCTCCACAACCAGGCAAGCGTACCTCTAGAGCCAGG
CCCTTAAGCGGAGAATCGGAGATA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG221662 representing NM_008425
 Red=Cloning site Green=Tags(s)

MGSVRTNRYISVSSEEDGMKLATMAVANGFGNGKSKVHTRQQCRSRFVKKDGHCVNQFINVGEKGQRYLA
 DIFTTTCVDIRWRWMLVIFCLAFVLSWLFVFCVFWLIALLLHGLDTSKVSACVSEVNSFTAFLFSIETQ
 TTIGYGFRCVTDCEPIAVFMVVFQSIIVGCIIDAFIIGAVMAKMAKPKKRNELVFSHNAVIAMRDGKLC
 MWRVGNLRKSHLVEAHVRAQLLKSRITSEGEYIPLDQIDINVGFDSGIDRIFLVSPITIVHEIDEDSPLY
 DLSKQDIDNADFEIVVILEGMVEATAMTTQCRSSYLANEILWGHRYEVLFEKHYKVDYSRFHKTYEV
 PNTPLCSARDLAEKKYILSNANSFCYENEVALTSKEEEEDSENGVPESTSTDSPPGIDLHNQASVPLEPR
 PLRRESEI

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_008425

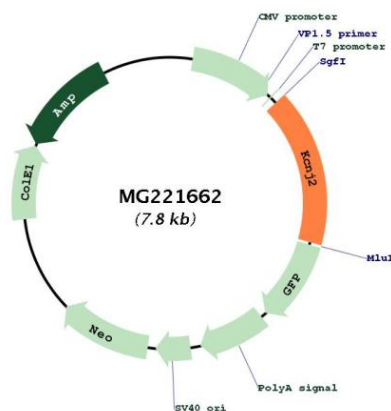
ORF Size: 1284 bp

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](#)

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| 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: | <ol style="list-style-type: none"> 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: | <u>NM_008425.4</u> , <u>NP_032451.1</u> |
| RefSeq Size: | 5468 bp |
| RefSeq ORF: | 1287 bp |
| Locus ID: | 16518 |
| UniProt ID: | <u>P35561</u> |
| Cytogenetics: | 11 75.23 cM |
| Gene Summary: | Probably participates in establishing action potential waveform and excitability of neuronal and muscle tissues. 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 extracellular barium and cesium.[UniProtKB/Swiss-Prot Function] |

Product images:



Circular map for MG221662

