

Product datasheet for **MG215658**

Kcnj12 (NM_010603) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Kcnj12
Synonyms:	IRK-2; IRK2; Kir2.2; MB-IRK2
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >MG215658 representing NM_010603
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTACTATAGGGCGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACCGCAGCCAGTCGGGCCAACCCCTACAGCATCGTATCATCAGAGGAGGACGGGCTGCACCTGGTTA
CCATGTCAGGCGCAACGGTTTTGGCAATGGCAAGGTGCATACACGGCGCCGGTCCGCAACCGCTTCGT
CAAGAAGAACGGTCAGTGCAACATTGAATTCGCCAACATGGACGAGAAGTCACAACGCTACCTGGCTGAC
ATGTTTACCACGTGTGGACATCCGCTGGCGCTACATGCTGCTCATCTTCTCTGGCCTTCTTGCCCT
CCTGGTTGTTGTTGGCATCATCTTCTGGGTCATTGCTGTGCCCCACGGGGACCTGGAGCCAGCCGAGGG
CCGTGGCCGTACACCCTGTGTGTTGCAAGTCCACGGCTTCATGGCAGCCTTCTCTTCTCCATTGAGACA
CAGACCACCATGGCTACGGGCTACGCTGTGTGACTGAAGAGTGCCCGGTGGCTGTCTTCATGGTGGTGG
CGCAGTCCATTGTGGGCTGCATCATTGACTCCTTCATGATTGGTGCATCATGGCCAAGATGGCAGGCC
CAAGAAGCGCGCACAGACTCTGCTTTTCAGCCATAATGCCGTGGTGGCTCTGCGTGACGGCAAGCTCTGC
CTCATGTGGCGCGTGGGCAACCTGCGTAAGAGTCACATCGTGGAGGCCATGTGCGGGCCAGCTCATCA
AGCCCAGGGTCACAGAGGAGGGTGAGTACATCCCACTGGACCAGATTGACATCGATGTCGGCTTTGACAA
GGGCTAGACCGTATCTTCTGGTATCACCCATCACCATCTTGACGAGATTGATGAGGCCAGCCCACTG
TTTGGCATTAGCCGTAGGACCTTGAGACAGACGACTTTGAGATTGGTTCATCCTGGAGGGCATGGTAG
AGGCCACAGCCATGACCACACAGGCTCGCAGTTCTACCTGGCTAACGAGATCCTGTGGGGCCACCGCTT
TGAGCCAGTCTCTCGAAGAGAAGAACCAGTACAAGATTGACTATTCACACTCCACAAGACCTACGAG
GTGCCATACACCCCGCTGCAGCGCCAAGGACCTGGTGGAGAACAAGTCTCTCTGCCAGCGCCAACCT
CTTTCTGCTATGAGAACGAGCTGGCCTTCTGAGCAGAGATGAGGAGGACGAGGTGGCTACCGACCGGGA
TGGCCGAGCCCTCAGCCCGAGCATGACTTTGACAGACTGCAGGCCAGCAGCGCTGCCCTTGAACGGCCC
TACAGACGGGAGTCGGAGATT

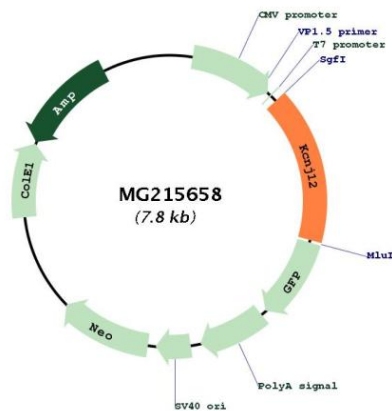
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
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.
Note:	<p>Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.</p>
RefSeq:	<p>NM_010603.5, NP_034733.3</p>
RefSeq Size:	<p>2463 bp</p>
RefSeq ORF:	<p>1590 bp</p>
Locus ID:	<p>16515</p>
Cytogenetics:	<p>11 37.96 cM</p>

Gene Summary:

Inward rectifying potassium channel that is activated by phosphatidylinositol 4,5-bisphosphate and that probably participates in controlling the resting membrane potential in electrically excitable cells. 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.[UniProtKB/Swiss-Prot Function]

Product images:

Circular map for MG215658