

Product datasheet for **MG221580**

Kcnj1 (NM_001168354) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Kcnj1 (NM_001168354) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Kcnj1
Synonyms: Kir1.1; ROMK; Romk2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG221580 representing NM_001168354
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTTCAAACATCTTCGAAGATGGTTTGTCACTCACATATTTGGGCGTTCTCGGCAACGAGCAAGTTGG
 TCTCCAAAGATGGAAGGTGTAACATCGAGTTTGGCAATGTAGATGCACAGTCGAGGTTTATATTCTTTGT
 GGATATCTGGACAACGTACTTGACCTGAAATGGAGGTACAAAATGACCGTGTTTCATCACAGCCTTCTTG
 GGGAGTTGGTTTCTTTGGTCTCCTGTGGTATGTCGTAGCCTATGTTTCATAAGGATCTCCAGAGTTCT
 ACCCACCTGACAACCGTACTCCTTGTGTGGAGAACATTAATGGCATGACATCAGCCTTTCTGTTTTCTCT
 AGAGACCCAAGTGACCATAGGTTACGGATTCAGGTTTGTGACAGAACAGTGTGCCACTGCCATTTTCTG
 CTTATCTTCCAGTCTATTCTTGGAGTGATCATCAATTCTTTCATGTGTGGTGCCATATTAGCCAAGATCT
 CTAGACCCAAAAACGTGCAAAGACATTACATTCAGCAAGAAATGCGGTGATCAGCAAACGTGGGGGAA
 GCTCTGTCTCCTCATCCGAGTAGCAAACTTTAGGAAAAGCCTTCTGATTGGCAGTCACATATATGGTAAG
 CTTCTGAAGACTACCATCACACCTGAAGGAGAGACCATTATTTGGATCAGACCAATATAAACTTTGTAG
 TTGATGCTGGCAATGAAAATTTGTTCTTCATTTCCCACTGACAATCTACCACATTATTGACCACAACAG
 CCCTTTCTTCCACATGGCGGCAGAACTTTCCCAACAGGACTTCGAGTTGGTTGTCTTTTAGATGCC
 ACAGTAGAATCCACCAGTGCAACCTGCCAAGTCCGCACATACATCCCAGAAGAGGTGCTTTGGGTT
 ACCGTTTTGTTCCCATCGTATCCAAGACCAAGGAAGGAAATACCGAGTGGATTTCCATAACTTTGGTAA
 GACGGTGAAGTGAGACCCCTCATTGTGCCATGTGCCTATAATGAGAAAGATGCCAGGGCCAGGATG
 AAGAGAGGCTATGACAACCCTAACCTTTGTCTTGTGAGAAGTTGATGAAACAGACGACACCCAAATG

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG221580 representing NM_001168354
 Red=Cloning site Green=Tags(s)

MFKHLRRWFVTHIFGRSRQRARLVSKDGRCNIEFGNVDAQSRFIFVVDIWTTVLDLKWRYKMTVFITAFL
 GSWFLFGLLWYVYVHKDLPEFYPPDNRTPCVENINGMTSAFLFSLETQVTIGYGFRFVTEQCATAIFL
 LIFQSIILGVIINSFMCGAILAKISRPKKRAKTITFSKNAVISKRGGKLCLLIRVANLRKSLIGSHIYGK
 LLKTTITPEGETIILDQTNINIFVVDAGNENLFFISPLTIYHIIDHNSPFFHMAAETLSQQDFELVVFLDG
 TVESTSATCQVRTSYIPEEVLWGYRFPVIVSKTKEGKYRVDFHNFGKTVEVETPHCAMCLYNEKDARARM
 KRGYDNPNFVLSVDETDQTQM

TRTRPLE - GFP Tag - V

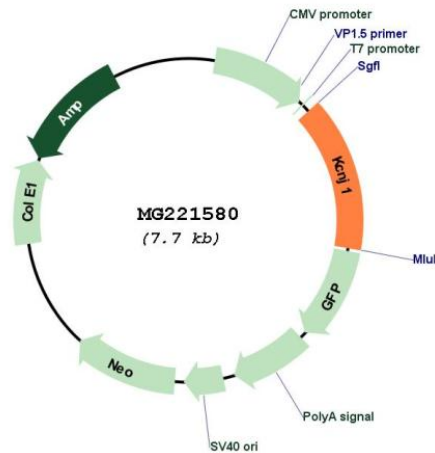
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM_001168354

| | |
|-------------------------------|--|
| ORF Size: | 1176 bp |
| 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: | 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: | NM_001168354.1 , NP_001161826.1 |
| RefSeq Size: | 3075 bp |
| RefSeq ORF: | 1179 bp |
| Locus ID: | 56379 |
| Cytogenetics: | 9 A4 |
| Gene Summary: | In the kidney, probably plays a major role in potassium homeostasis. 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 channel is activated by internal ATP and can be blocked by external barium (By similarity).[UniProtKB/Swiss-Prot Function] |