

Product datasheet for MR227234

Kcnj10 (NM_001039484) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Kcnj10 (NM_001039484) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Kcnj10
Synonyms: BIR10; BIRK-1; Kir1.2; Kir4.1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR227234 representing NM_001039484
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACGTCGGTTCGCTAAGGTCTATTACAGTCAGACGACTCAGACAGAGAGCCGCCCCCTAGTGGCCCCAG
 GAATACGCCGGAGGAGGGTCTCACGAAAGACGGCCGGAGCAATGTGAGAATGGAGCACATTGCTGACAA
 GCGTTTCTCTACCTCAAGGATCTATGGACGACCTTCATTGACATGCAATGGCGTACAAGCTTCTGCTC
 TTCTCTGCAACCTTTCAGGCACGTGGTTCCTCTTGGTGTGGTGTGGTATCTGGTAGCTGTGGCCATG
 GGGACCTGTTGGAGCTGGGACCTCTGCCAACCACACGCCTTGTGTGGTGCAGGTGCACAGCTCACCGG
 AGCCTTCTCTTCTCCCTGGAATCCCAGACCACCATCGGCTATGGCTTCCGCTACATCAGTGAGGAATGC
 CCACTGGCCATCGTGCTTCTTATTGCGCAGCTGGTGTCTACCACCATTCTGAAAATCTTCATCACAGGTA
 CCTTCTTGC AAAGATTGCCCGCCTAAGAAGAGGGCCGAGACGATCCGCTTTCAGCCAGCATGCCGTTGT
 GGCTTCCCACAACGGGAAGCCTTGCCCTTATGATCCGGGTTGCCAATATGCGGAAGAGTCTCCTCATTGGA
 TGCCAGGTGACAGGCAAACCTGCTTCAAACGCACCAGACAAAGGAGGGTGAGAATATTCGGCTCAACCAGG
 TCAACGTGACTTCCAAGTAGACACAGCCTCAGACAGCCCCTTCTCATCTACCCTGACTTTCTACCA
 TGTGGTAGATGAGAGCAGCCCCTTAAAAGATCTCCCGCTCCGAGTGGGGAGGGGACTTTGAGCTGGTG
 CTGATCCTGAGTGGGACGGTGGAGTCCACCAGTGCCACCTGCCAAGTTCGCACTTCTACCTACCTACCGGAGG
 AGATCCTCTGGGGTTACGAGTTCACGCCTGCGATCTCACTGTACGCCAGTGGCAAATACATAGCTGACTT
 CAGCCTTTTCGACCAGGTTGTGAAAGTGGCATCTCCAGTGGTCTCCGCGATAGCACCGTACGCTATGGA
 GACCCCGAGAAGCTCAAGTTGGAGGAGTCATTAAGAGAGCAAGCTGAAAAGGAAGGCAGTGCCCTTAGTG
 TCGCATCAGCAACGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR227234 representing NM_001039484
 Red=Cloning site Green=Tags(s)

MTSVAKVYYSQTTQTESRPLVAPGIRRRRVLTkdGRSNVRMEHIADKRFLYLKDLWTTfIDMQWRYKLLL
 FSATfAGTWfLFGVVWYLVAVAHGDLLELgPPANHTPCVVQVHTLTGAFLfSLESQTTIGYGFRISEEC
 PLAIVLLIAQLVLTtILEIFITGTFLAKIARPKKRAETIRfSQHAVVASHNGKPCLMIRVANMRKSLlIG
 CQVTGKLLQTHQTKEGENIRLNQVNVTFQVDTASDSPFLILPLTFYHVVDessPLKDLPLRSgEGDFELV
 LILSGTVESTATCQVRtSYLPEEILWGYEFTPAISLSASgKYIADfSLFDQVVkVAsPSGLRDSTVRYG
 DPEKlKLEESLREqAEKEGSALSVRISNV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001039484

ORF Size: 1137 bp

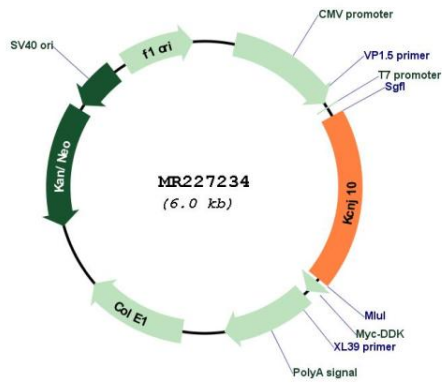
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:	<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_001039484.1, NP_001034573.1</u>
RefSeq Size:	5407 bp
RefSeq ORF:	1140 bp
Locus ID:	16513
UniProt ID:	<u>Q9JM63</u>
Cytogenetics:	1 79.69 cM
MW:	42.9 kDa
Gene Summary:	May be responsible for potassium buffering action of glial cells in the brain. 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 (By similarity). In the kidney, together with KCNJ16, mediates basolateral K(+) recycling in distal tubules; this process is critical for Na(+) reabsorption at the tubules (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR227234