

Product datasheet for **RC234038**

KIR5.1 (KCNJ16) (NM_001270422) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: KIR5.1 (KCNJ16) (NM_001270422) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: KIR5.1
Synonyms: BIR9; KIR5.1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC234038 representing NM_001270422
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGCTATTACGGCAGCAGCTATCATATTATCAATGCGGACGCAAAATACCCAGGCTACCCGCCAGAGC
 ACATTATAGCTGAGAAGAGAAGACAAGAAGACGATTACTTCACAAAGATGGCAGCTGTAATGTCTACTT
 CAAGCACATTTTTGGAGAATGGGAAGCTATGTGGTTGACATCTCACCCTCTGTGGACCAAGTGG
 CGCCATATGTTTGTGATATTTCTTTATCTTATATTCTCTCGTGGTTGATATTTGGCTCTGTCTTTTGGC
 TCATAGCCTTTCATCATGGCGATCTATTAATGATCCAGACATCACACCTTGTTGACAACGTCCATTC
 TTTCACAGGGCCCTTTTGTCTCCCTAGAGACCCAAACCACCATAGGATATGGTTATCGCTGTGTTACT
 GAAGAATGTTCTGTGGCCGTGCTCATGGTATCCTCCAGTCCATCTTAAGTTGCATCATAAATACCTTTA
 TCATTGGAGCTGCCTTGGCCAAATGGCAACTGCTCGAAAGAGAGCCCAACCATTTCGTTTCAGCTACTT
 TGCACTTATAGGTATGAGAGATGGGAAGCTTTCGCTCATGTGGCGCATTGGTGATTTTCGGCCAAACCAC
 GTGGTAGAAGGAACAGTTAGAGCCCACTTCTCCGCTATACAGAAGACAGTGAAGGGAGGATGACGATGG
 CATTTAAAGACCTCAAATTAGTCAACGACCAAAATCATCCTGGTCAACCCGATAACTTTGAGATTTTGGTG
 TGACCATGAGAGCCCTCTGTATGCCCTTGACCCAAAGCAGTAGCCAAAGATAAATTTGAGATTTTGGTG
 ACATTTATCTATACTGGTGATTCCACTGGAACATCTACCAATCTAGAAGCTCTATGTTCCCGAGAAA
 TTCTCTGGGGCCATAGGTTTAAATGATGTCTTGGAAGTTAAGAGGAAGTATTACAAAGTGAAGTCTTACA
 GTTTGAAGGAAGTGTGGAAGTATATGCCCCCTTTTGCAGTGCCAAGCAATTGGACTGGAAGACCAGCAG
 CTCCACATAGAAAAAGCACCACCAGTTCGAGAATCCTGCACGTCGGACACCAAGGCGAGACGAAGGTGAT
 TTAGTGAGTGGCATTGTGAGCAGCTGTGAAAACCTGAGGAGACCACCACTTCCGCCACACATGAATA
 TAGGGAACACCTTATCAGAAAGCTCTCCTGACTTTAAACAGAATCTCTGTAGAATCCCAAATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC234038 representing NM_001270422
Red=Cloning site Green=Tags(s)

MSYYGSSYHIINADAKYPGPPEHIIAEKRRARRRLLHKDGCNVYFKHIFGEWGSYVVDIFFTLVDTKW
 RHMVFVIFSLSYILSWLIFGSVFWLIAFHGGDLLNDPDIIPCVDNVHSFTGAFLFSLETQTTIGYGYRCVT
 EECSSVAVLMVILQSIILSCIINTFIIIGAALAKMATARKRAQTIRFSYFALIGMRDGKLCMLMWRIGDFRPNH
 VVEGTVRAQLLRYTEDESEGRMTMAFKDLKLVNDQIILVTPITIVHEIDHESPLYALDRKAVAKDNFEILV
 TFIYTG DSTGTS HQSRSSYVPREILWGHFRFNDVLEVKRKYKVNCLQFEGSVEVYAPFCSAKQLDWKDQQ
 LHIEKAPPVRESCTSDTKARRRSFSAVAIVSSCENPEETTTSATHEYRETPYQKALLTLNRI SVESQ M

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6318_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001270422

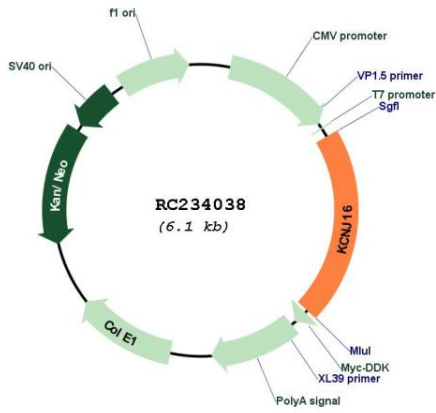
ORF Size: 1254 bp

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_001270422.1, NP_001257351.1</u>
RefSeq Size:	4209 bp
RefSeq ORF:	1257 bp
Locus ID:	3773
UniProt ID:	<u>Q9NPI9</u>
Cytogenetics:	17q24.3
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
MW:	48 kDa
Gene Summary:	Potassium channels are present in most mammalian cells, where they participate in a wide range of physiologic responses. The protein encoded by this gene is an integral membrane protein and inward-rectifier type potassium channel. The encoded protein, which tends to allow potassium to flow into rather than out of a cell, can form heterodimers with two other inward-rectifier type potassium channels. It may function in fluid and pH balance regulation. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Apr 2014]

Product images:



Circular map for RC234038