

Product datasheet for **RC238108**

KIR5.1 (KCNJ16) (NM_001291625) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIR5.1 (KCNJ16) (NM_001291625) 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:	>RC238108 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCTATTACGGCAGCAGCTATCATATTATCAATGCGGACGCAAAATACCCAGGCTACCCGCCAGAGC
ACATTATAGCTGAGAAGAGAAGACAAGAAGACGATTACTTCACAAAGATGGCAGCTGTAATGTCTACTT
CAAGCACATTTTTGGAGAATGGGAAGCTATGTGGTTGACATCTCACCCTCTGTGGACCAAGTGG
CGCCATATGTTTGTGATATTTCTTTATCTTATATTCTCTCGTGGTTGATATTTGGCTCTGTCTTTTGGC
TCATAGCCTTTCATCATGGCGATCTATTAATGATCCAGACATCACACCTTGTGTTGACAACGTCCATTC
TTTCACAGGGCCCTTTTTGTTCTCCCTAGAGACCCAAACCACCATAGGATATGGTTATCGCTGTGTTACT
GAAGAATGTTCTGTGGCCGTGCTCATGGTGATCCTCCAGTCCATCTTAAGTTGCATCATAAATACCTTTA
TCATTGGAGCTGCCTTGGCCAAATGGCAACTGCTCGAAAGAGAGCCCAAACCATTCGTTTCAGCTACTT
TGCACTTATAGGTATGAGAGATGGGAAGCTTTCGCTCATGTGGCGCATTGGTGATTTTCGGCCAAACCAC
GTGGTAGAAGGAACAGTTAGAGCCCACTTCTCCGCTATACAGAAGACAGTGAAGGGAGGATGACGATGG
CATTTAAAGACCTCAAATTAGTCAACGACCAAAATCATCCTGGTCAACCCGATAACTTTGATTTGCAAT
TGACCATGAGAGCCCTCTGTATGCCCTTGACCCAAAGCAGTAGCCAAAGATAAATTTGAGATTTTGGTG
ACATTTATCTATACTGGTGATTCCACTGGAACATCTACCAATCTAGAAGCTCTATGTTCCCGAGAAA
TTCTCTGGGCCATAGGTTTAAATGATGTCTTGGAAAGTTAAGAGGAAGTATTACAAAGTGAAGTCTTACA
GTTTGAAGGAAGTGTGGAAGTATATGCCCCCTTTTGCAGTGCCAAGCAATTGGACTGGAAGACCAGCAG
CTCCACATAGAAAAAGCACCACCAGTTCGAGAATCCTGCACGTCGGACACCAAGGCGAGACGAAGGTGAT
TTAGTGCAAGTGGCATTGTGAGCAGCTGTGAAAACCTGAGGAGACCACCACTTCCGCCACACATGAATA
TAGGGAACACCTTATCAGAAAGCTCTCCTGACTTTAAACAGAATCTCTGTAGAATCCCAAATG

ACGGTACGGCGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC238108 protein sequence
Red=Cloning site Green=Tags(s)

MSYYGSSYHIINADAKYPGPPEHIIAEKRRARRRLLHKDGCNVYFKHIFGEWGSYVVDIFFTLVDTKW
 RHMVFVIFSLSYILSWLIFGSVFWLIAFHGGDLLNDPDIIPCVDNVHSFTGAFLFSLETQTTIGYGYRCVT
 EECSSVAVLMVILQSIILSCIINTFIIIGAALAKMATARKRAQTIRFSYFALIGMRDGKLCCLMWRIGDFRPNH
 VVEGTVRAQLLRYTEDESEGRMTMAFKDLKLVNDQIILVTPITIVHEIDHESPLYALDRKAVAKDNFEILV
 TFIYTG DSTGTS HQSRSSYVPREILWGHFRFNDVLEVKRKYKVNCLQFEGSVEVYAPFCSAKQLDWKDQQ
 LHIEKAPPVRESCTSDTKARRRSFSAVAIVSSCENPEETTTSATHEYRETPYQKALLTLNRI SVESQM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001291625

ORF Size: 1254 bp

OTI Disclaimer: 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:

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_001291625.1](#), [NP_001278554.1](#)

RefSeq Size: 4165 bp

RefSeq ORF: 1257 bp

Locus ID: 3773

UniProt ID: [Q9NPI9](#)

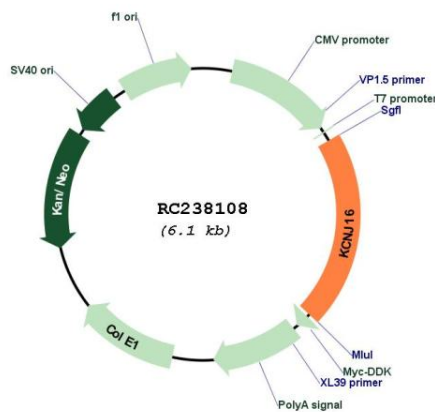
Cytogenetics: 17q24.3

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 RC238108