

Product datasheet for **SC123960**

KIR2.3 (KCNJ4) (NM_004981) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIR2.3 (KCNJ4) (NM_004981) Human Untagged Clone
Tag:	Tag Free
Symbol:	KIR2.3
Synonyms:	HIR; HIRK2; HRK1; IRK-3; IRK3; Kir2.3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_004981, the custom clone sequence may differ by one or more nucleotides

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ATGCACGGACACAGCCGCAACGGCCAGGCCACGTGCCCGGCGGAAGCGCCGAACCGCTTCGTCAAGA
AGAACGGCCAATGCAACGTGTACTTCGCCAACCTGAGCAACAAGTCGACGCGCTACATGGCGGACATCTT
CACCACCTGCGTGGACACGCGTGGCGCTACATGCTCATGATCTTCTCCGCGGCCCTTCTGTCTCCTGG
CTCTTTTTCGGCCTCCTTCTGGTGTATCGCCTTCTCCACGGTGACCTGGAGGCCAGCCAGGGGTGC
CTGCGCGGGGGGGCCCGCGGGTGGTGGCGGAGCAGCCCGGTGCCCCCAAGCCCTGCATCATGCA
CGTGAACGGCTTCTGGGTGCCTCCTGTCTCGGTGGAGACGCAGACGACCATCGGCTATGGGTTCCGG
TGCCTGACAGAGGAGTGCCCGCTGGCAGTCATCGCTGTGGTGGTCCAGTCCATCGTGGGCTGCGTCATCG
ACTCCTTCATGATTGGCACCATCATGGCCAAGATGGCGCGGCCAAGAAGCGGGCGCAGACGTTGCTGTT
CAGCCACCACGGGTCATTTCCGGTGCAGCAGGCAAGCTCTGCCTCATGTGGCGCGTGGGCAACCTGCGC
AAGAGCCACATTTGTGGAGGCCACGTGCGGGCCAGCTCATCAAGCCCTACATGACCCAGGAGGGCGAGT
ACCTGCCCTGGACCAGCGGGACCTCAACGTGGGCTATGACATCGGCCTGGACCGCATCTTCTGGTGTG
GCCATCATCATTGTCCACGAGATCGACGAGGACAGCCCGCTTTATGGCATGGGCAAGGAGGAGCTGGAG
TCGGAGGACTTTGAGATCGTGGTTCATCCTGGAGGGCATGGTGGAGGCCACGGCCATGACCAACAGGCC
GCAGCTCCTACCTGGCCAGCGAGATCCTGTGGGGCCACCGCTTTGAGCCTGTGGTCTTCGAGGAGAAGAG
CCACTACAAGGTGGACTACTCACGTTTTCAAGACCTACGAGGTGGCCGGCAGCCCTGCTGCTCGGCC
CGGGAGCTGCAGGAGAGTAAGATCACCGTGTGCCCGCCCCACCGCCCTCCAGTGCCTTCTGCTACG
AGAACGAGCTGGCCCTTATGAGCCAGGAGGAAGAGGAGATGGAGGAGGAGGCAGCTGCGGCGGCCCGGT
GGCCGAGGCTGGGCTGGAGGCGGGTCCAAGGAGGAGGCGGGCATCATCCGGATGCTGGAGTTCGGC
AGCCACCTGGACCTGGAGCGCATGCAGGCTTCCCTCCCGTGGACAACATCTCCTACCGCAGGGAGTCTG
CCATCTGA

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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004981 unedited
 NGGAGTCAGGATTTGTAACCGACTTACTATAGGCGGCCGCGCAATCGGCACGAGCCTGAC
 TGTACATTGGATTCTCCCTCACCCTGCTCCTAACAAGTGTGGGCACTGGGCAGGAAT
 TTGGGCTCAAGGACTCAAAGCAACTGGGAGAGAAGAGTCTAAAAAGGAGCTCAGACC
 CAGGCCCTGCGTCTTCCAGGTGACCACGCCGGCTTTTGGACATGCACGGACACAGCCGC
 AACGGCCAGGCCACGTGCCCGGGGAAGCGCCGCAACCGCTTCGTCAAGAAGAACGGC
 CAATGCAACGTGTACTTCGCCAACCTGAGCAACAAGTCGCAGCGCTACATGGCGGACATC
 TTCACCACCTGCGTGGACACGCGCTGGCGCTACATGCTCATGATCTTCTCCGCGGCTTC
 CTGTCTCCTGGCTCTTTTTCGGCTCCTCTTCTGGTGTATCGCCTTCTCCACGGTGAC
 CTGGAGGCCAGCCAGGGGTGCCTGCGCGGGGGGCCGCGCGGGTGGTGGCGGAGCA
 GCCCGGTGGCCCCAAGCCCTGCATCATGCACGTGAACGGCTTCTGGTGCCTTCTG
 TTCTCGTGGAGACGCAGACGACCATCGGCTATGGTTCCGGTGCCTGACAGAGGAGTGC
 CCGCTGGCAGTCATCGCTGTGGTGGTCCAGTCCATCGTGGGCTGCGTCATCGACTCCTC
 ATGATTGGCACCATCATGGCAAGATGGCGCGGCCAAGAAGCGGGCGCAGACGTTGCTG
 TTCAGCCACCACGCGGTCAATTCGGTGGCGGACGCGNAGCTCTGCCTCATGTGGCGCGT
 GGCAACCTGCGCAAGAGCCACATTGTGGAGGCCACCTGCGGGCCAGCTCATCAAGCCCT
 AA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004981 unedited
 NTTGCCTGCATGCAACTCCAGGCCAGGAGAGGCACTGGGGAGGGGTACAGGGATGCCA
 CCCGGATCTGTTAGAAACAGCTATGACCGCGCCGCAATCTAGAGTCGAGTTTTTTT
 TTTTGTTTTTTCCATCTGTCTCCATTTATAGATATTTACAAAAGAAAGTCATGAGCAA
 CAGGCCACAGTCATGAAAAGAAACGCACCCCCCTCCCAAACCTAACCCCTGCCACC
 CTGAAACCCGAGATGTCCCGCCAGAGTCCAGCCACCTTCCCAAGTTCTGAGAG
 CAAAGAGGGCACGTCCTTGAATAATCANTGGGGGAAGGGTGGTGGATCCGGGGACCTAGA
 GCCACAAAAGTAGGCGCTGGCGGAACCTCAGGCTGATCGGGGCCGAGCTTCTCCAGGCC
 TGGGTTGCTGAGTCANNAGAAAGGGTCCCCAGTCTTTGAACCCCACTTTCTCAGAANG
 GTCACGACCCAGGTGGCTCTGTCTGAGTTGGGAGAGGTCTGCATCCACCCCGGAGCTCT
 GTGGCATGTGAGGCCGGCTGAGTAATGCNACTCCTGCGAGAATGTGTACGAGGAGCTGC
 TCCTCAGTCAGTGTGCGACTCACATCGATAGCCGCTCTNCTGACNGCTCAGCCAGCTGGG
 CACGGCGGACTGTCTCTATTCTCTCTGTAAGCAATGTTCTCAAGCTGAG

Restriction Sites:

Please inquire

ACCN:

NM_004981

Insert Size:

2200 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](#)

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_004981.1, NP_004972.1</u>
RefSeq Size:	1913 bp
RefSeq ORF:	1338 bp
Locus ID:	3761
UniProt ID:	<u>P48050</u>
Cytogenetics:	22q13.1
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
Gene Summary:	<p>Several different potassium channels are known to be involved with electrical signaling in the nervous system. One class is activated by depolarization whereas a second class is not. The latter are referred to as inwardly rectifying K⁺ channels, and they have a greater tendency to allow potassium to flow into the cell rather than out of it. This asymmetry in potassium ion conductance plays a key role in the excitability of muscle cells and neurons. The protein encoded by this gene is an integral membrane protein and member of the inward rectifier potassium channel family. The encoded protein has a small unitary conductance compared to other members of this protein family. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1 and 2 encode the same protein.</p>