

Product datasheet for **SC124157**

Kir2.2 (KCNJ12) (NM_021012) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kir2.2 (KCNJ12) (NM_021012) Human Untagged Clone
Tag:	Tag Free
Symbol:	Kir2.2
Synonyms:	hIRK; hIRK1; hkir2.2x; IRK-2; IRK2; kcnj12x; KCNJN1; Kir2.2; Kir2.2v
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC124157 sequence for NM_021012 edited (data generated by NextGen Sequencing)

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ATGACCGCGGCCAGCCGGGCCAACCCCTACAGCATCGTGTGCATCGGAGGAGGACGGGCTG
CACCTGGTCAACATGTCGGGCGCCAACGGCTTCGGCAACGGCAAGGTGCACACGGGCGC
AGGTGCCGCAACCGCTTCGTCAAGAAGAATGGCCAGTGCAACATTGAGTTCGCCAACATG
GACGAGAAGTACAGCGCTACCTGGCTGACATGTTACCACCTGTGTGGACATCCGCTGG
CGGTACATGCTGCTCATCTTCTCGCTGGCCTTCTTGCCTCCTGGCTGCTGTTCCGCATC
ATCTTCTGGGTATCGCGGTGGCACACGGTGACCTGGAGCCGGCTGAGGGCCGGGGCCGC
ACACCCTGTGTGATGCAGGTGCACGGCTTCATGGCGGCCCTTCTTCTCCATCGAGACG
CAGACCACCATCGCTACGGGCTGCGCTGTGTGACGGAGGAGTGCCCGGTGGCCGTCTTC
ATGGTGGTGGCCAGTCCATCGTGGGCTGCATCATCGACTCCTTCATGATTGGTGCCATC
ATGGCCAAGATGGCAAGGCCAAGAAGCGGGCACAGACGCTGCTGTTAGCCACAACGCC
GTGGTGGCCCTGCGTGACGGCAAGCTCTGCCTCATGTGGCGTGTGGGTAACCTGCGCAAG
AGCCACATTGTGGAGGCCATGTGCGCGCGCAGCTCATCAAGCCGCGGGTACCGAGGAG
GGCGAGTACATCCCGCTGGACCAGATCGACATCGATGTGGGCTTCGACAAGGGCCTGGAC
CGCATCTTTCTGGTGTGCGCCATCACCATCTTGCATGAGATTGACGAGGCCAGCCCGCTC
TTCGGCATCAGCCGGCAGGACCTGGAGACGGACGACTTTGAGATCGTGGTTCATCTGGAA
GGCATGGTGGAGGCCACAGCCATGACCACCCAGGCCCGCAGCTCCTACCTGGCCAATGAG
ATCCTGTGGGTCACCGCTTTGAGCCCGTGTCTTCGAGGAGAAGAACCAGTACAAGATT
GACTACTCGCACTTCCACAAGACCTATGAGGTGCCCTCTACGCCCGCTGCAGTGCGAAG
GATCTGGTAGAGAACAAGTTCCTGCTGCCAGCGCCAACCTCTTCTGCTACGAGAACGAG
CTGGCCTTCTGAGCCGTGACGAGGAGGATGAGGCGGACGGAGACCAGGACGGCCGAAGC
CGGGACGGCCTCAGCCCCAGGCCAGGCATGACTTTGACAGACTCCAGGCTGGCGGGGG
GTCCTGGAGCAGCGGCCCTACAGACGGGAGTCAGAGATCTGA

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Clone variation with respect to NM_021012.4



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_021012 unedited
 NNNNGTGCCGTTCAAATTTGTATACGACTCATATAGGGCGGCCGGAATTCGCACGAGGC
 GCGCCGCGCCCGGGCCACTGACCGAGGATGTTCTAGTGACTGGATCCTTTCCAGTTGGTG
 CCTGGGAAATGGCAGCCACTACTAATTCAGCCTTGAAGACAGTACCGTGCCCACTCAGCA
 CCATTACATAGAAGATAGAACTCAAGAGGAGCCGCCCTGCCTGGAGCTAGCCTGGGGGCG
 AGCCAGGGTCCCCAACCCCGGGATGACCGCGGCCAGCCGGGCCAACCCCTACAGCATC
 GTGTTCATCGGAGGAGACGGGCTGCACCTGGTCACCATGTGCGGGGCCAACGGCTTCGGC
 AACGGCAAGGTGCACACGCGGCCAGGTGCCGCAACCGCTTCGTCAAGAAGAATGGCCAG
 TGCAACATTGAGTTCCGCAACATGGACGAGAAGTACAGCGCTACCTGGCTGACATGTTT
 ACCACCTGTGTGGACATCCGCTGGCGGTACATGCTGCTCATCTTCTCGCTGGCCTTCCTT
 GCCTCCTGGTGTGTTCCGTCATCTTCTGGGTTCATCGCGGTGGCACACGGTGACCTG
 GAGCCGGTGTAGGGCCGGGGCCGCACACCCTGTGTGATGCAGGTGCACGGCTTCATGGCG
 GCCTTCTCTTCCATCGAGACGCAGACCACCATCGGCTACGGGCTGCCTGTGTGACG
 GAGGAGTGCCCGTGGCCGTCTTCATGGTGGTGGCCAGTCCATCGTGGGCTGCATCATC
 GACTCCTTCATGATTGGTGCCATCATGGCCAAGATGGCAAGGCCAAGAAGCGGGCACAG
 ACGCTGCTGTTCCAGCCAA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_021012 unedited
 TCAACTTCACGGCCAGGAGAGGCACTGGGGAGGGGTACAGGGATGCCACCCGGGATCTG
 TTCAGGAAACAGCTATGACCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTT
 GTAACAGTCTCACCCAAGCTAAGGTCAAGAAAGCTGAAACCCGGTGTCTCCCAAGT
 TAAAAACAGCAAGGAGCACCGCAGCTAGCCAGCCTTGGACAGCAGAGGTGGGCCACCC
 ATCGAGCTGAGCTGCTTCCCGCAGGCTGCAGCTCCATCTTCAGGCAGAAGCCCTGGCCC
 TCGTGGCCTGGCCCCCAGGAGGCCACTTCTTTGCCCTGAGCCTGTGATAGCCTCTGAGG
 CCGGGGGCTGCCGCTCTGGCTGCCCCCTCTCCGGCCAACTTCTGAGGCCGTTGCAAGA
 AACATAAAACGACTAANACGCTACTGAGTCTGCAACCCAGGGCACTGGGCCGTTCTGCT
 CAAACCCGGGGCCCTGAGCGACCGCGNGCCTCTCCCGAGCCGGGGTGGATGTGTCAT
 GTCGGCCAAGGTTGGCTCAGATCTGACTCCCGTCTGTAGGGCCGCTGCTCCAGGACCC
 CGCCGCCAGCCTGGAGTCTGTCAAAGTCATGCCTGGCCTGGGGGTGANGCCGTCCTGGC
 TTCNGCCGTCCTGGTCTCCGTCGGCCTCATCTCCTCGTCACGGCTAAGGAANGGCCAC
 TCGTTCTCGTAACAAAAGGAGTTGGCGCTGGGC

Restriction Sites:

ECoRI-NOT

ACCN:

NM_021012

Insert Size:

2100 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_021012.3</u> , <u>NP_066292.2</u>
RefSeq Size:	1796 bp
RefSeq ORF:	1302 bp
Locus ID:	3768
UniProt ID:	<u>Q14500</u>
Cytogenetics:	17p11.2
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
Gene Summary:	This gene encodes an inwardly rectifying K ⁺ channel which may be blocked by divalent cations. This protein is thought to be one of multiple inwardly rectifying channels which contribute to the cardiac inward rectifier current (IK1). The gene is located within the Smith-Magenis syndrome region on chromosome 17. [provided by RefSeq, Jul 2008]