

Product datasheet for **RC223261**

KIR2.3 (KCNJ4) (NM_152868) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIR2.3 (KCNJ4) (NM_152868) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KIR2.3
Synonyms:	HIR; HIRK2; HRK1; IRK-3; IRK3; Kir2.3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC223261 representing NM_152868
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCACGGACACAGCCGCAACGGCCAGGCCACGTGCCCGCGGAAGCGCCGAACCGCTTCGTCGAAGA
 AGAACGGCCAATGCAACGTGTACTTCGCCAACCTGAGCAACAAGTCGACGCGCTACATGGCGGACATCTT
 CACCACCTGCGTGGACACGCGCTGGCGCTACATGCTCATGATCTTCTCCGCGCCTTCTCTGTCTCTGG
 CTCTTTTTCGGCCTCCTCTTCTGGTGTATCGCCTTCTCCACGGTGACCTGGAGGCCAGCCAGGGGTGC
 CTGCGCGGGGGCCCGCGCGGGTGGTGGCGGAGCAGCCCGGTGGCCCCAAGCCCTGCATCATGCA
 CGTGAACGGCTTCTGGGTGCCTTCTGTTCTCGGTGGAGACGCAGACGACCATCGGCTATGGGTTCCGG
 TGCGTGACAGAGGAGTCCCCGTGGCAGTCATCGCTGTGGTGGTCCAGTCCATCGTGGGCTGCGTCATCG
 ACTCCTTCATGATTGGCACCATCATGGCCAAGATGGCGCGCCCAAGAAGCTGGCGCAGACGTTGCTGTT
 CAGCCACCACGCGGTCAATTCGGTGCAGCGGCAAGCTCTGCCATGTGGCGGTGGCAACCTGCGC
 AAGAGCCACATTTGGAGGCCACGTGCGGGCCAGCTCATCAAGCCCTACATGACCCAGGAGGGCGAGT
 ACCTGCCCTGGACCAGCGGGACCTCAACGTGGGCTATGACATCGGCCTGGACCGCATCTTCTGGTGTG
 GCCCATCATATTGTCCACGAGATCGACGAGGACAGCCCGCTTTATGGCATGGGCAAGGAGGAGCTGGAG
 TCGGAGGACTTTGAGATCGTGGTTCATCTGGAGGGCATGGTGGAGGCCACGGCCATGACCAACAGGCC
 GCAGCTCTACCTGGCCAGCGAGATCCTGTGGGGCCACCGCTTTGAGCCTGTGGTCTTCGAGGAGAAGAG
 CCACTACAAGTGGACTACTCGGTTTTCAAGACCTACGAGGTGGCCGGCAGCCCTGCTGCTCGGCC
 CGGGAGCTGCAGGAGATAAGATCACCGTGTGCCCGCCACCGCCCTCCAGTGCCTTCTGCTACG
 AGAACGAGCTGGCCCTTATGAGCCAGGAGGAAGAGGAGATGGAGGAGGAGGCAGCTGCCGGCGCGCGT
 GGCCGCAGGCCTGGGCTGGAGCGGGTTCCAAGGAGGAGGCGGCATCATCCGGATGCTGGAGTTCGGC
 AGCCACCTGGACCTGGAGCGCATGCAGGCTTCCCTCCCGCTGGACAACATCTCTACCGCAGGGAGTCTG
 CCATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC223261 representing NM_152868
 Red=Cloning site Green=Tags(s)

MHGHSRNGQAHVPRRKRNRNFVKKNGQCNVYFANLSNKSQRYMADIFTTCDTRWRYMLMIFSAFLVSW
 LFFGLLFWCIAFFHGDLEASPGVPAAGGPAAGGGGAAPVAPKPCIMHVNGFLGAFVSVETQTTIGYGFR
 CVTEECPLAVIAVVVQSIIVGCVIDSFMIGTIMAKMARPKLAQTLFSSHAVISVRDGLCLMWRVGNLR
 KSHIVEAHVRAQLIKPYMTQEGEYLPDQRDLNVGYDIGLDRIFLVSPHIIIVHEIDEDSPLYGMGKEELE
 SEDFEIVVILEGMVEATAMTTQARSSYLASEILWGRFEPVVFEEKSHYKVDYSRPHKTYEVAGTPCCSA
 RELQESKITVLPAPPPPSAFYENELALMSQEEEEEMEEAAAAAAVAAGLLEAGSKEEAGIIRMLEFG
 SHLDLERMQASLPLDNISYRRESAI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6118_f07.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_152868

ORF Size: 1335 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_152868.3](#)

RefSeq Size: 2063 bp

RefSeq ORF: 1338 bp

Locus ID: 3761

UniProt ID: [P48050](#)

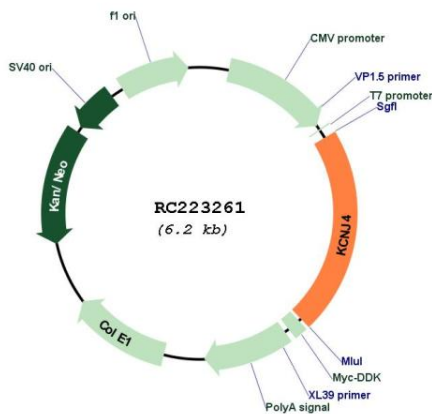
Cytogenetics: 22q13.1

Protein Families: Druggable Genome, Ion Channels: Potassium, Transmembrane

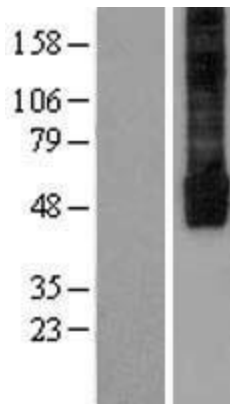
MW: 49.3 kDa

Gene Summary: 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]

Product images:



Circular map for RC223261



Western blot validation of overexpression lysate (Cat# [LY403495]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223261 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).