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Product datasheet for SC332749

GIRK1 (KCNJ3) (NM_001260509) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: GIRK1 (KCNJ3) (NM_001260509) Human Untagged Clone

Tag: Tag Free

Symbol: GIRK1

Synonyms: GIRK1; KGA; KIR3.1

Vector: pCMV6-Entry (PS100001)

Fully Sequenced ORF:

>SC332749 representing NM_001260509.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGTCTGCACTCCGAAGGAAATTTGGGGACGATTATCAGGTAGTGACCACATCGTCCAGCGGCTCGGGC
TTGCAGCCCCAGGGGCCAGGCCAGGACCCTCAGCAGCAGCTTGTGCCCAAGAAGAAGCGGCAGCGGTTC
GTGGACAAGAACGGCCGGTGCAATGTACAGCACGGCAACCTGGGCAGCGAGACAAGCCGCTACCTCTCG
GACCTCTTCACCACGCTGGTGGACCTCAAGTGGCGCTGGAACCTCTTCATCTTCATTCTCACCTACACC
GTGGCCTGGCTTTTCATGGCGTCCATGTGGTGGGTGATCGCCTACACTCGGGGCGACCTGAACAAAGCC
CACGTCGGTAACTACACGCCTTGCGTGGCCAATGTCTATAACTTCCCTTCTGCCTTCCTCTTCTTCATC
GAGACGGAGGCCACCATCGGCTATGGCTACCGATACATCACAGACAAGTGCCCCGAGGGCATCATCCTC
TTCCTCTTCCAGTCCATCCTGGGCTCCATCGTGGACGCCTTCCTCATCGGCTGCATGTTCATCAAGATG
TCCCAGCCCAAGAAGCGCGCCGAGACCCTCATGTTCAGCGAGCACGCGGTGATCTCCATGAGGGACGGA
AAACTCACGCTTATGTTCCGGGTGGGCAACCTGCGCAACAGCCACATGGTCTCCGCGCAGATTCGCTGC
AAGCTGCTCAAATCTCGGCAGACACCTGAGGGTGAGTTCCTTCCCCTTGACCAACTTGAACTGGATGTA
GGTTTTAGTACAGGGGCAGATCAACTTTTTCTTGTGTCCCCCCTCACAATTTGCCACGTGATCGATGCC
AAAAGCCCCTTTTATGACCTATCCCAGCGAAGCATGCAAACTGAACAGTTCGAGATTGTCGTCATCCTA
GAAGGCATTGTGGAAACAACTGGTGAGTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001260509

Insert Size: 927 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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).

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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_001260509.1
RefSeq Size:	1145 bp
RefSeq ORF:	927 bp
Locus ID:	3760
UniProt ID:	P48549
Cytogenetics:	2q24.1
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
MW:	35 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 has a greater tendency to allow potassium to flow into a cell rather than out of a cell, is controlled by G-proteins and plays an important role in regulating heartbeat. It associates with three other G-protein-activated potassium channels to form a heteromultimeric pore-forming complex that also couples to neurotransmitter receptors in the brain and whereby channel activation can inhibit action potential firing by hyperpolarizing the plasma membrane. These multimeric G-protein-gated inwardly-rectifying potassium (GIRK) channels may play a role in the pathophysiology of epilepsy, addiction, Down's syndrome, ataxia, and Parkinson's disease. Alternative splicing results in multiple transcript variants encoding distinct proteins. [provided by RefSeq, May 2012] Transcript Variant: This variant (3) lacks the 3' terminal exon and uses an alternate splice site in the upstream coding region, compared to variant 1. These differences result in a protein (isoform 3; also known as GIRK1c) with a truncated and novel C-terminus, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.