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Product datasheet for SC327451

Kir6.2 (KCNJ11) (NM_001166290) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kir6.2 (KCNJ11) (NM_001166290) Human Untagged Clone
Tag:	Tag Free
Symbol:	Kir6.2
Synonyms:	BIR; HHF2; IKATP; KIR6.2; MODY13; PHHI; PNDM2; TNDM3
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001166290, the custom clone sequence may differ by one or more nucleotides ATGGCCTGGTGGCTCATCGCCTTCGCCCACGGTGACCTGGCCCCCAGCGAGGGCACTGCT GAGCCCTGTGTCACCAGCATCCACTCCTTCTCGTCTGCCTTCCTTTTCTCCATTGAGGTC CAAGTGACTATTGGCTTTGGGGGGCGCATGGTGACTGAGGAGTGCCCACTGGCCATCCTG ATCCTCATCGTGCAGAACATCGTGGGGCTCATGATCAACGCCATCATGCTTGGCTGCATC TTCATGAAGACTGCCCAAGCCCACCGCAGGGCTGAGACCCTCATCTTCAGCAAGCATGCG GTGATCGCCCTGCGCCACGGCCGCCTCTGCTTCATGCTACGTGTGGGTGACCTCCGCAAG AGCATGATCATCAGCGCCACCATCCACATGCAGGTGGTACGCAAGACCACCAGCCCCGAG GGCGAGGTGGTGCCCCTCCACCAGGTGGACATCCCCATGGAGAACGGCGTGGGTGGCAAC AGCATCTTCCTGGTGGCCCCGCTGATCATCTACCATGTCATTGATGCCAACAGCCCACTC TACGACCTGGCACCCAGCGACCTGCACCACCACCAGGACCTCGAGATCATCGTCATCCTG GAAGGCGTGGTGGAAACCACGGGCATCACCACCCAGGCCCGCACCTCCTACCTGGCCGAT GAGATCCTGTGGGGCCAGCGCTTTGTGCCCATTGTAGCTGAGGAGGACGGACGTTACTCT GTGGACTACTCCAAGTTTGGCAACACCGTCAAAGTGCCCACACCACTCTGCACGGCCCGC CAGCTTGATGAGGACCACAGCCTACTGGAAGCTCTGACCCTCGCCTCAGCCCGCGGGCCC CTGCGCAAGCGCAGCGTGCCCATGGCCAAGGCCAAGCCCAAGTTCAGCATCTCTCCAGAT TCCCTGTCC
Restriction Sites:	Please inquire
ACCN:	NM_001166290
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).

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OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_001166290.1, NP_001159762.1
RefSeq Size:	2763 bp
RefSeq ORF:	912 bp
Locus ID:	3767
UniProt ID:	Q14654
Cytogenetics:	11p15.1
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
Protein Pathways:	Type II diabetes mellitus
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 is found associated with the sulfonylurea receptor SUR. Mutations in this gene are a cause of familial persistent hyperinsulinemic hypoglycemia of infancy (PHHI), an autosomal recessive disorder characterized by unregulated insulin secretion. Defects in this gene may also contribute to autosomal dominant non-insulin-dependent diabetes mellitus type II (NIDDM), transient neonatal diabetes mellitus type 3 (TNDM3), and permanent neonatal diabetes mellitus (PNDM). Multiple alternatively spliced transcript variants that encode different protein isoforms have been described for this gene. [provided by RefSeq, Oct 2009] Transcript Variant: This variant (2) uses a different segment for its 5' UTR and lacks 5' coding region sequence, compared to variant 1. Variant 2 uses a downstream start codon, which results in a protein (isoform 2) with a shorter N-terminus when it is 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.