OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG200340

KCNJ8 (NM_004982) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNJ8 (NM_004982) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KCNJ8
Synonyms:	KIR6.1; uKATP-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG200340 representing NM_004982
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTGGCCAGAAAGAGTATCATCCCGGAGGAGTATGTGCTGGCGCGCATCGCCGCAGAGAACCTGCGCA
AGCCGCGCATCCGAGACCGCCTCCCCAAAGCCCGCTTCATCGCCAAGAGCGGGGCCTGCAACCTGGCGCA
TAAGAACATCCGTGAGCAAGGACGCTTTCTACAGGACATCTTCACCACCTTGGTGGACCTGAAATGGCGC
CACACGCTGGTCATCTTTACCATGTCCTTCCTCTGCAGCTGGCTGCTCTTCGCTATCATGTGGTGGCTGG
TGGCCTTTGCCCATGGGGACATCTATGCTTACATGGAGAAAAGTGGAATGGAGAAAAGTGGTTTGGAGTC
CACTGTGTGTGTGACTAATGTCAGGTCTTTCACTTCTGCTTTTCTCTTCTCCATTGAAGTTCAAGTTACC
ATTGGGTTTGGAGGGAGGATGATGACAGAGGAATGCCCTTTGGCCATCACGGTTTTGATTCTCCAGAATA
TTGTGGGTTTGATCATCAATGCAGTCATGTTAGGCTGCATTTTCATGAAAACAGCTCAGGCTCACAGAAG
GGCAGAAACTTTGATTTTCAGCCGCCATGCTGTGATTGCCGTCCGAAATGGCAAGCTGTGCTTCATGTTC
CGAGTGGGTGACCTGAGGAAAAGCATGATCATTAGTGCCTCTGTGCGCATCCAGGTGGTCAAGAAAACAA
CTACACCTGAAGGGGAGGTGGTTCCTATTCACCAACTGGACATTCCTGTTGATAACCCAATCGAGAGCAA
TAACATTTTTCTGGTGGCCCCTTTGATCATCTGCCACGTGATTGACAAGCGCAGTCCCCTGTATGACATC
TCAGCAACTGACCTGGCCAACCAAGACTTGGAGGTCATAGTTATTCTGGAAGGAGTGGTTGAAACTACTG
GCATCACCACACAAGCACGAACCTCCTACATTGCTGAGGAGATCCAATGGGGCCACCGCTTTGTGTCCAT
TGTGACTGAGGAAGAAGGAGTGTATTCTGTGGATTACTCCAAATTTGGCAACACTGTTAAAGTAGCTGCT
CCACGGTGCAGTGCCCGAGAGCTGGATGAGAAACCTTCCATCCTTATTCAGACCCTCCAAAAGAGTGAAC
TGTCTCATCAAAATTCTCTGAGGAAGCGCAACTCCATGAGAAGAAACAATTCCATGAGGAGGAACAATTC
TATCCGAAGGAACAATTCTTCCCTCATGGTACCAAAGGTGCAATTTATGACTCCAGAAGGAAATCAAAAC
ACATCGGAATCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

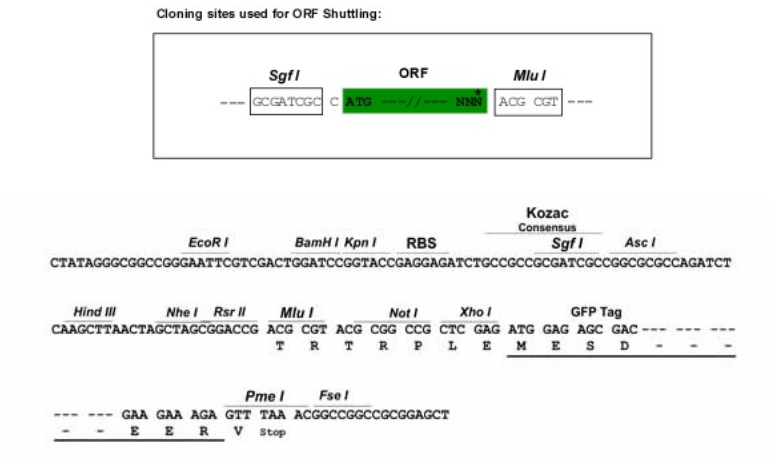
>RG200340 representing NM_004982
Red=Cloning site Green=Tags(s)

MLARKSIIPEEYVLARIAAENLRKPRIRDRLPKARFIAKSGACNLAHKNIREQGRFLQDIFTTLVDLKWR
HTLVIFTMSFLCSWLLFAIMWWLVAFAHGDIYAYMEKSGMEKSGLESTVCVTNVRSFTSAFLFSIEVQVT
IGFGGRMMTEECPLAITVLILQNIVGLIINAVMLGCIFMKTAQAHRRAETLIFSRHAVIAVRNGKLCFMF
RVGDLRKSMIISASVRIQVVKKTTTPEGEVVPIHQLDIPVDNPIESNNIFLVAPLIICHVIDKRSPLYDI
SATDLANQDLEVIVILEGVVETTGITTQARTSYIAEEIQWGHRFVSIVTEEEGVYSVDYSKFGNTVKVAA
PRCSARELDEKPSILIQTLQKSELSHQNSLRKRNSMRRNNSMRRNNSIRRNNSSLMVPKVQFMTPEGNQN
TSES

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004982

ORF Size: 1272 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_004982.4

RefSeq Size: 2381 bp

RefSeq ORF: 1275 bp

Locus ID: 3764

UniProt ID: Q15842

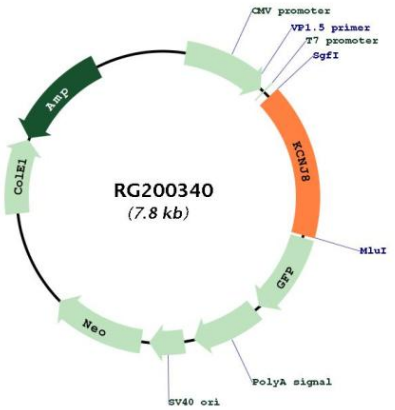
Cytogenetics: 12p12.1

Domains: IRK

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

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. Defects in this gene may be a cause of J-wave syndromes and sudden infant death syndrome (SIDS). [provided by RefSeq, May 2012]

Product images:



Circular map for RG200340