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Product datasheet for SC110809

KCNG3 (NM_172344) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNG3 (NM_172344) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNG3
Synonyms:	KV6.3; KV10.1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL6
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC110809 sequence for NM_172344 edited (data generated by NextGen Sequencing)

ATGACCTTCGGGCGCAGCGGGGCGGCCTCGGTGGTGCTGAACGTGGGCGGCGCCCGGTAT
TCGCTGTCCCGGGAGCTGCTGAAGGACTTCCCGCTGCGCCGCGTGAGCCGGCTGCACGGC
TGCCGCTCCGAGCGCGACGTGCTCGAGGTGTGCGACGACTACGACCGCGAGCGCAACGAG
TACTTCTTCGACCGGCACTCGGAGGCCTTCGGCTTCATCCTGCTCTACGTGCGCGGCCAC
GGCAAGCTGCGCTTCGCGCCGCGGATGTGCGAGCTCTCCTTCTACAACGAGATGATCTAC
TGGGGCCTGGAGGGCGCGCACCTCGAGTACTGCTGCCAGCGCCGCCTCGACGACCGCATG
TCCGACACCTACACCTTCTACTCGGCCGACGAGCCGGGCGTGCTGGGCCGCGACGAGGCG
CGCCCCGGCGGGGCCGAGGCGGCTCCCTCCAGGCGCTGGCTGGAGCGCATGCGGCGGACC
TTCGAGGAGCCCACGTCGTCGCTGGCCGCGCAGATCCTGGCTAGCGTGTCGGTGGTGTTC
GTGATCGTGTCCATGGTGGTGCTGTGCGCCAGCACGTTGCCCGACTGGCGCAACGCAGCC
GCCGACAACCGCAGCCTGGATGACCGGAGCAGGATAATTGAAGCTATCTGCATAGGTTGG
TTCACTGCCGAGTGCATCGTGAGGTTCATTGTCTCCAAAAACAAGTGTGAGTTTGTCAAG
AGACCCCTGAACATCATTGATTTACTGGCAATCACGCCGTATTACATCTCTGTGTTGATG
ACAGTGTTTACAGGCGAGAACTCTCAACTCCAGAGGGCTGGAGTCACCTTGAGGGTACTT
AGAATGATGAGGATTTTTTGGGTGATTAAGCTTGCCCGTCACTTCATTGGTCTTCAGACA
CTCGGTTTGACTCTCAAACGTTGCTACCGAGAGATGGTTATGTTACTTGTCTTCATTTGT
GTTGCCATGGCAATCTTTAGTGCACTTTCTCAGCTTCTTGAACATGGGCTGGACCTGGAA
ACATCCAACAAGGACTTTACCAGCATTCCTGCTGCCTGCTGGTGGGTGATTATCTCTATG
ACTACAGTTGGCTATGGAGATATGTATCCTATCACAGTGCCTGGAAGAATTCTTGGAGGA
GTTTGTGTTGTCAGTGGAATTGTTCTATTGGCATTACCTATCACTTTTATCTACCATAGC
TTTGTGCAGTGTTATCATGAGCTCAAGTTTAGATCTGCTAGGTATAGTAGGAGCCTCTCC
ACTGAATTCCTGAATTAA

Clone variation with respect to NM_172344.2

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_172344 unedited
TCCTTCCGTCCGTTGCCGCATTGGGCGGTAGGCGTGTACGGTGGGAAGGTCTATATAAGC
AGAGCTCATTTAGGTGACACTATAGAATACAAGCTACTTGTTCTTTTTGCAGCGGCCGCG
AATTCGGCACGAGGGGTGAGCGGCGCGCGCGGAGCCGGCGGGCGAGGAGGAGGACTGCAC
AGAGGCCCCGCCCCCGCCGCCGCGAGCCGGCTCTTCGCCGCCTCCGAACCCGCTCACTTT
GCCTCTCGCCTCTGGACGGCGGCGGGGCGGCCGCCGGATTCGCGGCCGCAGGGAGCGCCG
GAGACGGGGAGCTATTCCGCCCCGGCGGCTCCATTCGGCGCCCGCAGCCCTCAGGGGGTC
GGCCCCGCGGCTTGGGAGAGGGCACCGCGGCCTCGGTGTGCGCAGCCCTCGGGCGCGAGG
GTCGGCGGCGCGGACACAGCCGCGTTCCCAGCCGGTGGGGCTCAGCGCTGGCGCCGGCGA
GGACTCCCCGGCCACCCGCAGGTACCGCCGGGCGGAGGGCGCGCTACTAGCAGCGCCGGA
GATACTCGAGCCCAGGGACCCCCGGGCCAGCGGAGGGCAGGAGCGGAGCCCCGAGGGAGC
GCGGGCCCCGACGGCGCGCTCCCCCGTCAGCCACGGGCAGGCAGGCCCCGCGTGGCGGCT
TGAGGTGGGGGGCTGCAGCGGGGCCCTCGGGCCGAAAGTCCCCCGGGCAGCCAGCCATGA
CCTTCAGGCGCAGCGGGGCGGCCTCGGTGGTGCTGAACGTGAGCGGCGCCCGGTATTCGC
TGTCCCGGGAGCTGCTGAAGGACTTCCCGCTGCGCCGCGTGAGCCGGCTGCACGGCTGCC
GCTCCGAGCGCGACGTGCTCGAGGTGTGCGACGACTACGACCGCGAGCGCACGAGTACTT
CTTCGACCGCACTCGAAGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_172344 unedited
NGGTTGCTATTATGNACCGCGGCACGCAATCTANATCGAGTTTTTTTTTTTTTTTTTTTT
TTTTTTTTTTTTAAAAAAAAAAAATCCATGCCATTTATTTCAATTATATTAGAATACAAT
AAATATACAATAAATAACTGAATTTCTTTTGGGTATGTAAGAAGTAGCATACTAGCAGTA
ATAGGGAAAATAGGGCAAGATATTTAATGGCCAAACTATTACATAAGCTTAGGAAAGGAA
ATTAAGGGAAAGAAAACAGTTTTGCTATTATTACCTCAGCATGACAATGACAAAGAAGTG
TGATTTTTCCAGGCTTTTCTCAAAACCCAGAGATGTGTGAAGATTAACCTGCTGGGCTAG
GTTTCTGGAGATCCAGGTGTTAGCCCTGACTCCTTCACAATTATATTCTCTCCTGCCCTG
ATTTTCTACCTGTAATAGTTGAGGCTTGAACTAGATGATGGCTAAAATTCCTTTAATGAA
CACTTCTGGTAACCCTTTATTTGATAAATATATCCAGGTCCTCCATCACCCACCACTTCC
CAATCCCTGTCTTCTCTACCTCTGACAAAATTACTGTGTACAACATTCAATTTTTTATGA
ATCTGTCACTAATTATTTGTGTTTATATATACACTAACTTCTTTATGGTAACTGGTTGAA
AAAGCAAAATTCTAATTTCTGTTGCTAAAATTTAGTTACTAAACAATCATCACTTTTACA
TTATCTAGTCCTAAATATCTAGCCAGATTAACATGGCATATTAGTCAGTATTCCTACCAG
AAGAGTTTTGGTGTANCTGTGATTTCCCATGGTTTAAGATCAGATTCAATCTTTTGTATC
CCTCGCTTTTACTGGCTTAAATTGACTAGCTCACAGCACTAAAA

Restriction Sites: NotI-NotI

ACCN: NM_172344

Insert Size: 4000 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).

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_172344.1, NP_758847.1
RefSeq Size:	3791 bp
RefSeq ORF:	1278 bp
Locus ID:	170850
UniProt ID:	Q8TAE7
Cytogenetics:	2p21
Protein Families:	Druggable Genome, Ion Channels: Other, Transmembrane
Gene Summary:	Voltage-gated potassium (Kv) channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. This gene encodes a member of the potassium channel, voltage-gated, subfamily G. This member is a gamma subunit functioning as a modulatory molecule. Alternative splicing results in two transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (2), also known as Kv10.1a, lacks an alternate in-frame segment in the coding region, as compared to variant 1. It encodes isoform (2) that lacks an internal segment, as compared to isoform 1.