

Product datasheet for **MC216263**

Kcnq2 (NM_001006677) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnq2 (NM_001006677) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Kcnq2
Synonyms:	HNSPC; KQT2; Nmf134
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC216263 representing NM_001006677
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTGCAGAAGTCGCGCAACGGTGGCGTGTACCCGGCACAGCGGGGAAAAGAAGCTCAAGGTGGGCT
 TCGTGGGGCTGGACCCCGCGCGCCGACTCCACACGCGACGGCGGCTACTCATCGGGCTCCGAGGC
 CCCAAGCGCGGACGCTTTTGTAGCAAGCCGCGACGGCGCGGGAGCCGGGAAGCCCCGAAGCGC
 AACGCCTTCTACCGCAAGCTGCAGAATTTCTCTACAACGTGCTAGAGCGGCCCGCGGCTGGGCGTTCA
 TCTACCACGCCTACGTGTTCTTTTGTAGTCTTCTCTGCTTGTGCTTTCTGTGTTTTCCACCATCAAGGA
 GTACGAGAAGAGCTCTGAGGGGGCCCTACATCTTGGAAATCGTACTATCGTGGTATTCGGTGTGAG
 TACTTTGTGAGGATCTGGGCTGCAGGCTGCTGTTGCCGGTATCGAGGCTGGAGGGCAGGCTCAAGTTG
 CCAGGAAGCCGTCTGTGTGATTGATATCATGGTCTGATTGCCTCCATTGCTGTGCTGGCTGCTGGTTC
 CCAGGGCAATGTCTTTGCCACATCTGCGCTTCGGAGCTTGGGTTCTTGCAAATCTGCGGATGATCCGT
 ATGGACCGGAGGGGTGGCACCTGGAAGCTCTGGGATCGGTAGTCTACGCTCACAGCAAGGAGCTGGTGA
 CTGCCTGGTACATTGGCTTCTCTGCTCATCCTGGCCTCATTTCTGGTGTACTTGGCAGAAAAGGGTGA
 GAATGACCACTTTGACACCTACGCAGATGCACTCTGGTGGGCTGATCACCTGACGACCATTTGGCTAC
 GGGGACAAGTACCCTCAGACCTGGAACGGGAGGCTGCTGGCAGCGACCTTACCCTCATTGGTGTCTCGT
 TCTTTGCTCTTCTGCTGGCATTTTGGGATCCGGCTTGGCCCTGAAAGTCCAAGAGCAGCATCGGCAAAA
 ACATTTGAGAAACGGCGGAACCCTGCGGCAAGTCTGATCCAGTCTGCCTGGAGATTCTATGCTACTAAC
 CTCTCACGCCACCTGCACTCCACGTGGCAGTACTACGAGCGGACAGTCACTGTCCCCATGTACAGAC
 TCATCCCACCTCTGAACCAGCTGGAGCTGCTGAGGAATCTCAAGAGCAAATCTGGACTCACCTTCAAGAA
 GGAGCCACAGCCAGGCCATCACCAAGGTCAAGTCTCCTCCTGCCTCCAGCCGCCCTGGTGTGTGCTGACC
 CACCTTGCTTGTCTCTCTGTGATACACCATGTGTCATGGGGCAGGGCTACCATGGGGCCCTGTGTG
 GCTTCTATGTACAGCAAGTAACTGTGTGCTGCTGGCACACCCAGGGTCACTTCTCAGTTA**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001006677

Insert Size: 1392 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_001006677.1](#), [NP_001006678.1](#)

RefSeq Size: 2059 bp

RefSeq ORF: 1392 bp

Locus ID: 16536

Cytogenetics: 2 103.57 cM

Gene Summary: Associates with KCNQ3 to form a potassium channel with essentially identical properties to the channel underlying the native M-current, a slowly activating and deactivating potassium conductance which plays a critical role in determining the subthreshold electrical excitability of neurons as well as the responsiveness to synaptic inputs. Therefore, it is important in the regulation of neuronal excitability.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (9) differs in the 3' UTR and has multiple coding region differences (compared to variant 1), one of which results in a frameshift. This results in a shorter isoform (9) with a distinct C-terminus, compared to isoform 1.