

Product datasheet for **MC216465**

Kcnq2 (NM_001006676) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnq2 (NM_001006676) 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: >MC216465 representing NM_001006676
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTGCAGAAGTCGCGCAACGGTGGCGTGTACCCGGCACCAGCGGGGAAAAGAAGCTCAAGGTGGGCT
 TCGTGGGGCTGGACCCCGCGCGCCGACTCCACACGCGACGGCGCGCTACTCATCGCGGCTCCGAGGC
 CCCAAGCGCGGACGCTTTTGTAGCAAGCCGCGACGGCGCGGGAGCCGGGAAGCCCCGAAGCGC
 AACGCCTTCTACCGCAAGCTGCAGAATTTCTCTACAACGTGCTAGAGCGGCCCGCGGCTGGGCGTTCA
 TCTACCACGCCTACGTGTTCTTTTGTAGTCTTCTCTGCTTGTGCTTTCTGTGTTTTCCACCATCAAGGA
 GTACGAGAAGAGCTCTGAGGGGGCCCTACATCTTGGAAATCGTACTATCGTGGTATTCGGTGTGAG
 TACTTTGTGAGGATCTGGGCTGCAGGCTGCTGTTGCCGGTATCGAGGCTGGAGGGCAGGCTCAAGTTG
 CCAGGAAGCCGTCTGTGTGATTGATATCATGGTGTGATTGCCTCCATTGCTGTGCTGGCTGCTGGTTC
 CCAGGGCAATGTCTTTGCCACATCTGCGCTTCGGAGCTTGGGTTCTTGCAAATCTTGGGATGATCCGT
 ATGGACCGGAGGGGTGGCACCTGGAAGCTCTTGGGATCGGTAGTCTACGCTCACAGCAAGGAGCTGGTGA
 CTGCCTGGTACATTGGCTTCTCTGCTCATCCTGGCCTCATTTCTGGTGTACTTGGCAGAAAAGGGTGA
 GAATGACCACTTTGACACCTACGCAGATGCACTCTGGTGGGGTCTGATCACCTGACGACCATTTGGCTAC
 GGGGACAAGTACCCTCAGACCTGGAACGGGAGGCTGCTGGCAGCGACCTTACCCTCATTGGTGTCTCGT
 TCTTTGCTCTTCTGTGGCATTTTGGGATCCGGCTTGGCCCTGAAAGTCCAAGAGCAGCATCGGCAAAA
 ACACCTTGAGAAACGGCGGAACCTGCGGCAGGTCTGATCCAGTTCGCTGGAGATTCTATGCTACTAAC
 CTCTCAGCACCAGCTGCACTCCACGTGGCAGTACTACGAGCGGACAGTCACTGTCCCCATGTACAGCT
 CACAACTCAAACCTATGGGGCCTCCAGACTCATCCACCTCTGAACAGCTGGAGTCTGAGGAATCT
 CAAGAGCAAATCTGGACTCACCTTCAGGAAGGAGCCACAGCCAGAGCCATCACCAGGTGAGTTCTCTCT
 GCCTCCAGCCGCCCTGGTGTGTGCTGTACCCACCTTGCCTTGTCTCTGTGTATACACCATGTGTCAT
 GGGGCAGGGCTACCATGGGGCCCTGTGTGCTTCTATGTACAGCAAGTAACTGTGTGCTCTGGCACACC
 CAGGGTCACTTCTCAGTTA**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_001006676

Insert Size: 1422 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_001006676.1](#), [NP_001006677.1](#)

RefSeq Size: 1864 bp

RefSeq ORF: 1422 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 (8) 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 (8) with a distinct C-terminus, compared to isoform 1.