

Product datasheet for **MC229047**

Kcnq2 (NM_001302888) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnq2 (NM_001302888) 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: >MC229047 representing NM_001302888
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGTGCAGAAGTCGCGCAACGGTGGCGTGTACCCGGCACACGCGGGGAAAAGAAGCTCAAGGTGGGCT
 TCGTGGGGCTGGACCCCGCGCGCCGACTCCACACGCGACGGCGGCTACTCATCGCGGCTCCGAGGC
 CCCAAGCGCGGACGCTTTTGTAGCAAGCCGCGACGGCGCGGGAGCCGGGAAGCCCCGAAGCGC
 AACGCCTTCTACCGCAAGCTGCAGAATTTCTCTACAACGTGCTAGAGCGGCCCGCGGCTGGCGTTCA
 TCTACCACGCCTACGTGTTCTTTTGTCTCTCTGCTTGTGCTTTCTGTGTTTTCCACCATCAAGGA
 GTACGAGAAGAGCTCTGAGGGGGCCCTCATACCTTGGAAATCGTACTATCGTGGTATTCGGTGTGAG
 TACTTTGTGAGGATCTGGGCTGCAGGCTGCTGTTGCCGGTATCGAGGCTGGAGGGCAGGCTCAAGTTG
 CCAGGAAGCCGTTCTGTGTGATTGATATCATGGTGTGATTGCCCTCCATTGCTGTGCTGGCTGCTGGTTC
 CCAGGGCAATGTCTTTGCCACATCTGCGCTTCGGAGCTTGGGTTCTTGCAAATCTTGGGATGATCCGT
 ATGGACCGGAGGGGTGGCACCTGGAAGCTCTTGGGATCGGTAGTCTACGCTCACAGCAAGGAGCTGGTGA
 CTGCCTGGTACATTGGCTTCTCTGCTCATCCTGGCCTCATTTCTGGTGTACTTGGCAGAAAAGGGTGA
 GAATGACCACTTTGACACCTACGCAGATGCACTCTGGTGGGGTCTGATCACCTGACGACCATTTGGCTAC
 GGGGACAAGTACCCTCAGACCTGGAACGGGAGGCTGCTGGCAGCGACCTTTACCCCTATTGGTGTCTCGT
 TCTTTGCTCTTCTGTGGCATTTTGGGATCCGGCTTTGCCCTGAAAGTCCAAGAGCAGCATCGGCAAAA
 ACACCTTTGAGAAACGGCGGAACCTGCGGCAGGTCTGATCCAGTCTGCCTGGAGATTCTATGCTACTAAC
 CTCTCACGCCAGCCTGCACCTCACGTGGCAGTACTACGAGCGGACAGTCACTGTCCCCATGTACAGCT
 CACAAACTCAAACCTATGGGGCTCCAGACTCATCCACCTCTGAACCAGCTGGAGCTGCTGAGGAATCT
 CAAGAGCAAATCTGGACTCACCTTCAGGAAGGAGCCACAGCCAGAGCCATCACCAAGTCAGAAGGTCAGT
 TTGAAAGATCGTGTCTTCTCCAGCCCCGAGGCATGGCTGCCAAGGGAAAAGGGTCTCCCGAGGCCAGA
 CGGTCCGGCGGTCCCCAGTGGGATCAGAGTCTTGATGACAGCCCGAGCAAGGTGCCAAGAGCTGGAG
 CTTTGGTGACCGCAGCCGACACGCCAGGCTTTCCGCATCAAGGGTGTGATCCCGGCAGAAATTCAGAA
 GCAAGCCTCCCTGGGAGGACATCGTAGAGGACAACAAGAGCTGTAAGTGCAGTTTGTGACTGAAGATC
 TTACCCCTGGCCTCAAAGTTAGCATCAGAGCTGTGTGTATGCGGTTCTTGGTATCTAAGCGAAAGTT
 CAAAGAGAGTCTGCGCCATATGATGTGATGGACGTATCGAACAGTACTCGGCTGGACACTTGGATATG
 TTGTCCCGCATCAAGAGCCTGCAGTCCAGAGTGGACCAGATTGTGGGGCGGGCCCAACAATAACGGATA
 AGGACCGCACAAAGGCCAGCGGAAACGGAGCTGCCCGAAGACCCAGCATGATGGGACGGCTTGGGAA
 GGTGGAGAAACAGGTCTTGTCCATGGAAAAGAAGCTCGACTTCTTGGTGTGAGCATCTATACAGAGAATG
 GGCATCCCACCAGCAGAGACAGAGGCCTATTTTGGGGCCAAGGAGCCTGAGCCGGCACACCCTACCACA
 GCCCAGAGGACAGCCGTGACCATGCAGACAAGCATGGCTGTATCATTAAAGATCGTCCGCTCCACCAGCTC
 TACGGGCCAGAGGAACTACGCAGACCCCCAGCCATCCCCCTGCCAGTGTCTCCCTCCACCTCGTGG
 CAGCAGAGCCACCAGCGCATGGCACCTCCCCTGTGGGAGACCATGGCTCACTGGTACGCATCCCACCAC
 CCCCTGCACACGAGCGGTGCTGTGCTACGGTGGGGCAACAGAGCCAGTACCGAGTTCTTGGAGCT
 GGAGGGCACCCCAGCCTGCAGGCCCTTGAGGCTGCCCTGCGGGATAGCGACAGTCCATCTCCATCCCT
 TCGGTGGACCATGAGGAGCTGGAGCGCTCTTACGCGGCTTCAAGTATCTCCAGTCCAAGGAGAACCCTGG
 ATGCCCTGGGAGCTGTTATGCAGCTGTGGCACCATGCGCCAAGTCAAGGCCCTACATTGCAGAGGGAGA
 GTCTGACACAGACTCAGACCTCTGCACACCATGTGGCCCTCCCCACGCTCTGCCACTGGTGGGGCCCC
 TTTGGAGATGTGGCTTGGCAGGGCCCCAGGAAA**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGTTTAA

Restriction Sites: Sgfl-Mlul
ACCN: NM_001302888
Insert Size: 2556 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).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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:	<ol style="list-style-type: none"> 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:	<u>NM_001302888.1, NP_001289817.1</u>
RefSeq Size:	8244 bp
RefSeq ORF:	2556 bp
Locus ID:	16536
UniProt ID:	<u>Q9Z351</u>
Cytogenetics:	2 103.57 cM
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (13) lacks an alternate in-frame exon and uses an alternate in-frame splice site, resulting in an isoform (13) that is shorter than 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.</p>