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Product datasheet for MC221079

Kcnq2 (NM_001006669) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnq2 (NM_001006669) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Kcnq2
Synonyms:	HNSPC; KQT2; Nmf134
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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Fully Sequenced ORF:

>MC221079 representing NM_001006669
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGCAGAAGTCGCGCAACGGTGGCGTGTACCCCGGCACCAGCGGGGAAAAGAAGCTCAAGGTGGGCT
TCGTGGGGCTGGACCCCGGCGCGCCCGACTCCACACGCGACGGCGCGCTACTCATCGCGGGCTCCGAGGC
CCCCAAGCGCGGCAGCGTTTTGAGCAAGCCGCGGACGGGCGGCGCGGGAGCCGGGAAGCCCCCGAAGCGC
AACGCCTTCTACCGCAAGCTGCAGAATTTCCTCTACAACGTGCTAGAGCGGCCCCGCGGCTGGGCGTTCA
TCTACCACGCCTACGTGTTCCTTTTAGTCTTCTCCTGCCTTGTGCTTTCTGTGTTTTCCACCATCAAGGA
GTACGAGAAGAGCTCTGAGGGGGCCCTCTACATCTTGGAAATCGTGACTATCGTGGTATTCGGTGTTGAG
TACTTTGTGAGGATCTGGGCTGCAGGCTGCTGTTGCCGGTATCGAGGCTGGAGGGGCAGGCTCAAGTTTG
CCAGGAAGCCGTTCTGTGTGATTGATATCATGGTGCTGATTGCCTCCATTGCTGTGCTGGCTGCTGGTTC
CCAGGGCAATGTCTTTGCCACATCTGCGCTTCGGAGCTTGCGGTTCTTGCAAATCTTGCGGATGATCCGT
ATGGACCGGAGGGGTGGCACCTGGAAGCTCTTGGGATCGGTAGTCTACGCTCACAGCAAGGAGCTGGTGA
CTGCCTGGTACATTGGCTTCCTCTGCCTCATCCTGGCCTCATTTCTGGTGTACTTGGCAGAAAAGGGTGA
GAATGACCACTTTGACACCTACGCAGATGCACTCTGGTGGGGTCTGATCACCCTGACGACCATTGGCTAC
GGGGACAAGTACCCTCAGACCTGGAACGGGAGGCTGCTGGCAGCGACCTTTACCCTCATTGGTGTCTCGT
TCTTTGCTCTTCCTGCTGGCATTTTGGGATCCGGCTTTGCCCTGAAAGTCCAAGAGCAGCATCGGCAAAA
ACACTTTGAGAAACGGCGGAACCCTGCGGCAGGTCTGATCCAGTCTGCCTGGAGATTCTATGCTACTAAC
CTCTCACGCACCGACCTGCACTCCACGTGGCAGTACTACGAGCGGACAGTCACTGTCCCCATGTACAGAC
TCATCCCACCTCTGAACCAGCTGGAGCTGCTGAGGAATCTCAAGAGCAAATCTGGACTCACCTTCAGGAA
GGAGCCACAGCCAGAGCCATCACCAAGTCAGAAGGTCAGTTTGAAAGATCGTGTCTTCTCCAGCCCCCGA
GGCATGGCTGCCAAGGGAAAGGGGTCTCCCCAGGCCCAGACGGTCCGGCGGTCCCCCAGTGCGGATCAGA
GTCTTGATGACAGCCCGAGCAAGGTGCCCAAGAGCTGGAGCTTTGGTGACCGCAGCCGCACACGCCAGGC
TTTCCGCATCAAGGGTGCTGCATCCCGGCAGAATTCAGAAGAAGCAAGCCTCCCTGGGGAGGACATCGTA
GAGGACAACAAGAGCTGTAACTGCGAGTTTGTGACTGAAGATCTTACCCCTGGCCTCAAAGTTAGCATCA
GAGCTGTGTGTGTTATGCGGTTCTTGGTATCTAAGCGAAAGTTCAAAGAGAGTCTGCGCCCATATGATGT
GATGGACGTCATCGAACAGTACTCGGCTGGACACTTGGATATGTTGTCCCGCATCAAGAGCCTGCAGTCC
AGAGTGGACCAGATTGTGGGGCGGGGCCCAACAATAACGGATAAGGACCGCACCAAAGGCCCAGCGGAAA
CGGAGCTGCCCGAAGACCCCAGCATGATGGGACGGCTTGGGAAGGTGGAGAAACAGGTCTTGTCCATGGA
AAAGAAGCTCGACTTCTTGGTGAGCATCTATACACAGAGAATGGGCATCCCACCAGCAGAGACAGAGGCC
TATTTTGGGGCCAAGGAGCCTGAGCCGGCACCACCCTACCACAGCCCAGAGGACAGCCGTGACCATGCAG
ACAAGCATGGCTGTATCATTAAGATCGTCCGCTCCACCAGCTCTACGGGCCAGAGGAACTACGCAGCACC
CCCAGCCATCCCCCCTGCCCAGTGTCCTCCCTCCACCTCGTGGCAGCAGAGCCACCAGCGCCATGGCACC
TCCCCTGTGGGAGACCATGGCTCACTGGTCCTGCGACTGGAGAGGAGTGCTGGCATGATGAGCTGTCACT
AG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001006669

Insert Size: 2172 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_001006669.2, NP_001006670.1
RefSeq Size:	2965 bp
RefSeq ORF:	2172 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 (5) lacks two alternate in-frame exons, and it also contains alternate 3' exon structure resulting in an alternate 3' coding region, compared to variant 1. The encoded isoform (5) has a distinct C-terminus and 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.