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Product datasheet for SC122099

KCNQ5 (NM_019842) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNQ5 (NM_019842) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNQ5
Synonyms:	Kv7.5; MRD46
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC122099 sequence for NM_019842 edited (data generated by NextGen Sequencing)

ATGCCCCGCCACCACGCGGGAGGAGAGGAGGGCGGCGCCGCCGGGCTCTGGGTGAAGAGC
GGCGCAGCGGCGGCGGCGGCGGGCGGGGGGCGCTTGGGCAGCGGCATGAAGGATGTGGAG
TCCGGCCGGGGCAGGGTGCTGCTGAACTCGGCAGCCGCCAGGGGCGACGGCCTGCTACTG
CTGGGCACCCGCGCGGCCACGCTCGGTGGCGGCGGCGGTGGCCTGAGGGAGAGCCGCCGG
GGCAAGCAGGGGGCCCGGATGAGCCTGCTGGGGAAGCCGCTCTCTTACACGAGTAGCCAG
AGCTGCCGGCGCAACGTCAAGTACCGGCGGGTGCAGAACTACCTGTACAACGTGCTGGAG
AGACCCCGCGGCTGGGCGTTCATCTACCACGCTTTCGTTTTTCTCCTTGTCTTTGGTTGC
TTGATTTTGTCAGTGTTTTCTACCATCCCTGAGCACACAAAATTGGCCTCAAGTTGCCTC
TTGATCCTGGAGTTCGTGATGATTGTCGTCTTTGGTTTGGAGTTCATCATTCGAATCTGG
TCTGCGGGTTGCTGTTGTCGATATAGAGGATGGCAAGGAAGACTGAGGTTTGCTCGAAAG
CCCTTCTGTGTTATAGATACCATTGTTCTTATCGCTTCAATAGCAGTTGTTTCTGCAAAA
ACTCAGGGTAATATTTTTGCCACGTCTGCACTCAGAAGTCTCCGTTTCCTACAGATCCTC
CGCATGGTGCGCATGGACCGAAGGGGAGGCACTTGGAAATTACTGGGTTCAGTGGTTTAT
GCTCACAGCAAGGAATTAATCACAGCTTGGTACATAGGATTTTTGGTTCTTATTTTTTCG
TCTTTCCTTGTCTATCTGGTGGAAAAGGATGCCAATAAAGAGTTTTCTACATATGCAGAT
GCTCTCTGGTGGGGCACAATTACATTGACAACTATTGGCTATGGAGACAAAACTCCCCTA
ACTTGGCTGGGAAGATTGCTTTCTGCAGGCTTTGCACTCCTTGGCATTTCTTTCTTTGCA
CTTCCTGCCGGCATTCTTGGCTCAGGTTTTGCATTAAAAGTACAAGAACAACACCGCCAG
AAACACTTTGAGAAAAGAAGGAACCCAGCTGCCAACCTCATTCAGTGTGTTTGGCGTAGT
TACGCAGCTGATGAGAAATCTGTTTCCATTGCAACCTGGAAGCCACACTTGAAGGCCTTG
CACACCTGCAGCCCTACCAAGAAAGAACAAGGGGAAGCATCAAGCAGTCAGAAGCTAAGT
TTTAAGGAGCGAGTGCGCATGGCTAGCCCCAGGGGCCAGAGTATTAAGAGCCGACAAGCC
TCAGTAGGTGACAGGAGGTCCCCAAGCACCGACATCACAGCCGAGGGCAGTCCCACCAAA
GTGCAGAAGAGCTGGAGCTTCAACGACCGAACCCGCTTCCGGCCCTCGCTGCGCCTCAAA
AGTTCTCAGCCAAAACCAGTGATAGATGCTGACACAGCCCTTGGCACTGATGATGTATAT
GATGAAAAAGGATGCCAGTGTGATGTATCAGTGGAAGACCTCACCCCACCACTTAAAACT
GTCATTCGAGCTATCAGAATTATGAAATTTCATGTTGCAAAACGGAAGTTTAAGGAAACA
TTACGTCCATATGATGTAAAAGATGTCATTGAACAATATTCTGCTGGTCATCTGGACATG
TTGTGTAGAATTAAAAGCCTTCAAACACGTGTTGATCAAATTCTTGGAAAAGGGCAAATC
ACATCAGATAAGAAGAGCCGAGAGAAAATAACAGCAGAACATGAGACCACAGACGATCTC
AGTATGCTCGGTCGGGTGGTCAAGGTTGAAAAACAGGTACAGTCCATAGAATCCAAGCTG
GACTGCCTACTAGACATCTATCAACAGGTCCTTCGGAAAGGCTCTGCCTCAGCCCTCGCT
TTGGCTTCATTCCAGATCCCACCTTTTGAATGTGAACAGACATCTGACTATCAAAGCCCT
GTGGATAGCAAAGATCTTTCGGGTTCCGCACAAAACAGTGGCTGCTTATCCAGATCAACT
AGTGCCAACATCTCGAGAGGCCTGCAGTTCATTCTGACGCCAAATGAGTTCAGTGCCCAG
ACTTTCTACGCGCTTAGCCCTACTATGCACAGTCAAGCAACACAGGTGCCAATTAGTCAA
AGCGATGGCTCAGCAGTGGCAGCCACCAACACCATTGCAAACCAAATAAATACGGCACCC
AAGCCAGCAGCCCCAACAACTTTACAGATCCCACCTCCTCTCCCAGCCATCAAGCATCTG
CCCAGGCCAGAAACTCTGCACCCTAACCCTGCAGGCTTACAGGAAAGCATTTCTGACGTC
ACCACCTGCCTTGTTGCCTCCAAGGAAAATGTTCAGGTTGCACAGTCAAATCTCACCAAG
GACCGTTCTATGAGGAAAAGCTTTGACATGGGAGGAGAAACTCTGTTGTCTGTCTGTCCC
ATGGTGCCGAAGGACTTGGGCAAATCTTTGTCTGTGCAAAACCTGATCAGGTCGACCGAG
GAACTGAATATACAACTTTCAGGGAGTGAGTCAAGTGGCTCCAGAGGCAGCCAAGATTTT
TACCCCAAATGGAGGGAATCCAAATTGTTTATAACTGATGAAGAGGTGGGTCCCGAAGAG
ACAGAGACAGACACTTTTGATGCCGCACCGCAGCCTGCCAGGGAAGCTGCCTTTGCATCA
GACTCTCTAAGGACTGGAAGGTCACGATCATCTCAGAGCATTTGTAAGGCAGGAGAAAGT
ACAGATGCCCTCAGCTTGCCTCATGTCAAACTGAAATAA

Clone variation with respect to NM_019842.3

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_019842 unedited
ACTATATGGCGGCCGCGAATTCGGCACGAGGAGAAACCCTCTCAAAGTGACGCCCCAAAC
AGGTCCGGTATTTAGAATTCGAAGCTAAAGGCTGTTAGAAATTGGGACTCCTCGGCCTCC
TCTGCAGCCCCTCCTTTCCCGCCCCGAAGCCCGGGCGGTTTGCTGGCTGCCTGCTTCCCC
GCCCCCGGCTCAGAGGTCTCTGGCTGGCGGGCGCCCCGTCGGCCGCCGGCTTCCTCCTTG
AAACCCGCCGGCGCACATGAGGCCGCTGCCCCCGCCGCAGGCGCTGGCGGCCCCCTCGCG
GTGCCCGTGGTGATGCCATGCCCCGCCACCACGCGGGAGGAGAGGAGGGCGGCGCCGCCG
GGCTCTGGGTGAAGAGCGGCGCAGCGGCGGCGGCGGCGGGCGGGGGGCGCTTGGGCAGCG
GCATGAAGGATGTGGAGTCCGGCCGGGGCAGGGTGCTGCTGAACTCGGCAGCCGCCAGGG
GCGACGGCCTGCTACTGCTGGGCACCCGCGCGGCCACGCTCGGTGGCGGCGGCGGTGGCC
TGAGGGAGAGCCGCCGGGGCAAGCAGGGGGCCCGGATGAGCCTGCTGGGGAAGCCGCTCT
CTTACACGAGTAGCCAGAGCTGCCGGCGCAACGTCAAGTACCGGCGGGTGCAGAACTACC
TGTACAACGTGCTGGAGAGACCCCGCGGCTGGGCGTTCATCTACCACGCTTTCGTTTTTC
TCCTTG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_019842 unedited
CAGGAGAGGCACTGGGGAGGGGTCACAGGGATGCCACCCGGGATCTGTTCAGGAAACAGC
TATGACCGTGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTGAAATTTGAAGG
TGTTTACTCCCATAATTTCAAAATACAGTGTCAAATCTTCTAAATGACCTAAACTTGACA
TATTCATACACCCCATAGCATTAGCTGTGTTTGGTTTCTCAGGCTTTTTAACTCAAGGTA
CATTACTAAATGAGTGGGTTAATGTCGATGCACCTTGGAATTTTAGCCATCCCTAAACAT
GCATTTTCATGCAATTAAAAGGTAACGGGCTTATAAACTGCCTTTCATGTTCTTCCCGAT
TCTTGCAATTTCAACTTTTTAGAAGGGCTTTCGAAATAGTTCATGCAATGATATGTATGG
CTAAAGAACTGCTATGCCTGGAAAGAAAATGAAGAACTTATTTCAGTTTGACATGAGGCA
AGCTGAGGGCATCTGTACTTTCTCCTGCCTTACAAATGCTCTGAGATGATCGTGACCTTC
CAGTCCTTAGAGAGTCTGATGCANAGGCAGCTTCCCTGGCAGGCTGCGGTGCGGCATCAA
AAGTGTCTGTCTCTGTCTCTTCGGGACCCACCTCTTCATCAGTTATAAACAATTTGGATT
CCCTCCATTTGGGGTAAAAATCTTGGCTGCCTCTGGAGCCACTTGACTCACTCCCTGAAA
GTGTAT

Restriction Sites: Please inquire

ACCN: NM_019842

Insert Size: 3500 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_019842.2, NP_062816.2

RefSeq Size:	3325 bp
RefSeq ORF:	2799 bp
Locus ID:	56479
UniProt ID:	Q9NR82
Cytogenetics:	6q13
Domains:	KCNQ_channel, ion_trans
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
Gene Summary:	This gene is a member of the KCNQ potassium channel gene family that is differentially expressed in subregions of the brain and in skeletal muscle. The protein encoded by this gene yields currents that activate slowly with depolarization and can form heteromeric channels with the protein encoded by the KCNQ3 gene. Currents expressed from this protein have voltage dependences and inhibitor sensitivities in common with M-currents. They are also inhibited by M1 muscarinic receptor activation. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2009] Transcript Variant: This variant (1) lacks an alternate in-frame exon in the central coding region, compared to variant 4. The resulting isoform (1) lacks an internal segment, compared to isoform 4. 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.