

Product datasheet for **RC228621**

KCNQ5 (NM_001160132) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNQ5 (NM_001160132) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNQ5
Synonyms:	Kv7.5; MRD46
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC228621 representing NM_001160132
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCCGCCACCACGCGGGAGGAGAGGGCGGCGCCCGGGCTCTGGGTGAAGAGCGGCCAGCGG
 CGGCGCGCGCGGGCGGGGGCGCTTGGGCAGCGCATGAAGGATGTGGAGTCCGGCCGGGCAGGGTGT
 GCTGAACTCGGCAGCCGCCAGGGGCGACGGCTGCTACTGCTGGCACCCGCGGCCACGCTCGGTGGC
 GGCGGGGTGGCCTGAGGGAGAGCCCGGGGCAAGCAGGGGGCCGGATGAGCCTGCTGGGGAAGCCGC
 TCTTTACACGAGTAGCCAGAGCTGCCGCGCAACGTCAAGTACCGCGGGTGCAGAACTACCTGTACAA
 CGTGCTGGAGAGACCCCGCGCTGGCGTTTATCTACCACGCTTTCGTTTTTCTCCTTGTCTTTGGTTGC
 TTGATTTTGTGAGTGTTCACCATCCCTGAGCACACAAAATTGGCCTCAAGTTGCCTCTTGATCTGG
 AGTTTCGTGATGATTGTCGTCTTTGGTTTGGAGTTCATCATTGCAATCTGGTCTGCGGGTGTCTGTTGTCG
 ATATAGAGGATGGCAAGGAAGACTGAGGTTTGGCTCGAAAGCCCTTCTGTGTTATAGATACCATTTGTTCTT
 ATCGCTTCAATAGCAGTTGTTTCTGCAAAAACCTCAGGGTAAATTTTTGCCACGCTGCACTCAGAAAGTC
 TCCGTTTCTACAGATCCTCCGCATGGTGCATGGACCGAAGGGGAGGCACTTGAAAATTACTGGGTTT
 AGTGGTTTATGCTCACAGCAAGGAATTAATCACAGCTTGGTACATAGGATTTTTGGTTCTTATTTTTTTCG
 TCTTTCTTGTCTATCTGGTGGAAAAGGATGCCAATAAAGAGTTTTCTACATATGCGAGATGCTCTCTGGT
 GGGGCACAATTACATTGACAACCTATTGGCTATGGAGACAAAACCTCCCTAACTGGCTGGGAAGATTGCT
 TTCTGCAGGCTTTCGACTCCTTGGCATTCTTTCTTTGCACTTCTGCCGCGATTCTTGGCTCAGTTTTT
 GCATTAAGTACAAGAACAACCCGCCAGAAAACCTTTGAGAAAAGAAGGAACCCAGCTGCCAACCTCA
 TTCAGTGTGTTTGGCGTAGTTACGCAGCTGATGAGAACTCTGTTCCATTGCAACCTGGAAGCCACACT
 GAAGGCCTTGACACCTGCAGCCCTACCAATAAGTTCTGTAGTAATAAGCAGAAGCTCTTCAGAATGTAC
 ACCTCACGGAAGCAGAGTCAGAAGCTAAGTTTTAAGGAGCGAGTGCATGGCTAGCCCCAGGGCCAGA
 GTATTAAGAGCCGACAAGCCTCAGTAGGTGACAGGAGGTCCCAAGCACCACATCACAGCCGAGGGCAG
 TCCCACCAAGTGCAGAAGAGCTGGAGCTTCAACGACCGAACCCTTCCGGCCCTCGTGCCTCAAA
 AGTTCTCAGCCAAAACAGTGATAGATGCTGACACAGCCCTTGGCACTGATGATGATATGATGAAAAAG
 GATGCCAGTGTGATGATCAGTGAAGACCTCACCCACCACTTAAAACCTGCTTTCGAGCTATCAGAAT
 TATGAAATTTTATGTTGCAAAACGGAAGTTAAGGAAACATTACGTCCATATGATGATAAAGATGTCATT
 GAACAATATTCTGCTGGTCACTGGACATGTTGTGTAGAAATTAAGCCCTTCAAACAGTGTGATCAAA
 TTCTTGGAAAAGGCCAAATCACATCAGATAAGAAGAGCCGAGAGAAAATAACAGCAGAACATGAGACCAC
 AGACGATCTCAGTATGCTCGGTCCGGTGGTCAAGGTTGAAAAACAGGTACAGTCCATAGAATCCAAGCTG
 GACTGCCTACTAGACATCTATCAACAGGTCCTTCGGAAAGGCTCTGCCTCAGCCCTCGCTTTGGCTTCAT
 TCCAGATCCCACCTTTTGAATGTGAACAGACATCTGACTATCAAAGCCCTGTGGATAGCAAAGATCTTTC
 GGGTTCGCGACAAAACAGTGGCTGCTTATCCAGATCAACTAGTGCCAACATCTCGAGAGGCTGCAGTTC
 ATTCTGACGCCAAATGAGTTCAGTGCCAGACTTCTACGCGCTTAGCCCTACTATGCACAGTCAAGCAA
 CACAGGTGCCAATTAGTCAAAGCGATGGCTCAGCAGTGGCAGCCACCAACACCATTGCAAACCAATAAA
 TACGGCACCCAAGCCAGCAGCCCAACAACCTTTACAGATCCCACCTCCTCTCCAGCCATCAAGCATCTG
 CCCAGGCCAGAAAACCTGCAACCCTAACCTGCAAGGCTTACAGGAAAGCATTCTGACGTCAACCCTGCC
 TTGTTGCCTCAAAGGAAAATGTTCAAGTTCAGAGTCAAATCTCACCAGGACCGTTCTATGAGGAAAAG
 CTTTGACATGGGAGGAGAAAACCTGTTGTCTGTCTGTCCATGGTGCCGAAGGACTTGGGCAAACTTTG
 TCTGTGCAAAAACCTGATCAGGTCGACCGAGGAACTGAATATACACTTTTCAAGGAGTGAAGTGGCT
 CCAGAGGCGCAAGATTTTTACCCAAATGGAGGGAATCCAATTTGTTATAACTGATGAAGAGGTGGG
 TCCCGAAGAGACAGAGACAGACTTTTGTGCGCACCCGAGCCTGCCAGGGAAGCTGCCTTTGCATCA
 GACTCTTAAGGACTGGAAGTCAAGTATCTCAGAGCATTGTAAGGCAGGAGAAAGTACAGATGCC
 TCAGCTTGCTCATGTCAAACCTGAAA

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC228621 representing NM_001160132
 Red=Cloning site Green=Tags(s)

MPRHHAGGEEGGAAGLVVKSGAAAAAGGGRLGSGMKDVESGRGRVLLNSAAARGDGLLLGTRAAATLGG
 GGGGLRESRRGKQGARMSLLGKPLSYTSSQSCRRNVKYRRVQNYLYNVLERPRGWAFIYHAFVFLLVFGC
 LILSVFSTIPEHTKLASSCLLILEFVMIIVVFGLEFIIRIWSAGCCCRYRGWQGRLEFARKPFVVIDTIVL
 IASIAVVSAKTQGNIFATSALRSLRFLQLIRMVMDRRGGTWKLLGSVVYAHSKELITAWYIGFLVLI
 SFLVYLVEKDANKEFSTYADALWWGTITLTTIGYGDKPTLTLWLGRLLSAGFALLGISFFALPAGILGSGF
 ALKVQEQRQKHFEKRRNPAANLIQCVWRSYAADEKSVSIATWPKHLKALHTCSPTNKFCNKKQLFRMY
 TSRKQSQKLSFKERVMSAPRGQSIKSRQASVGDRRSPSTDITAEGSPTKVQKSWSFNDRTRFRPSLRK
 SSQPKPIDADTALGTDDVYDEKGCQCDVSVEDLTPPLKTVIRAIRIMKFHVAKRKFETLRPYDVKDVI
 EQYSAGHLDMLCRIKSLQTRVDQILGKGQITSDKKSREKITAHEHTDDLMLGRVVKVEKQVQSIESKL
 DCLLDIYQQVLRKGSASALALASFQIPPFCEQTSDYQSPVDSKDLSGSAQNSGCLSRSTANISRGLQF
 ILTPNEFSAQTFYALSPMTMSQATQVPISQSDGSAVAATNTIANQINTAPKPAAPTLLQIPPLPAIKHL
 PRPETLHPNPAGLQESISDVTTCLVASKENVQVAQSNLTKDRSMRKSFDMGGETLLSVCMPMPKDLGKSL
 SVQNLIRSTEELNIQLSGSESSGSRGSQDFYPKWRESKLFITDEEVGPEETETDTFDAAPQAREAAFAS
 DSLRTGRSRSSQSICKAGESTDALSLPHVKLK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

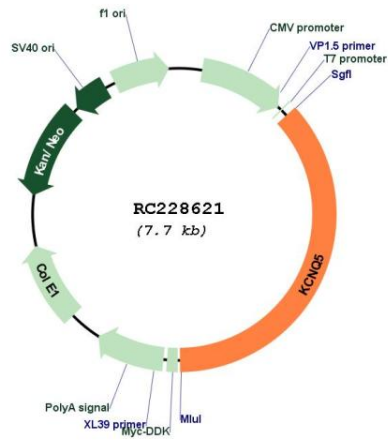


ACCN: NM_001160132

ORF Size: 2826 bp

OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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:	NM_001160132.2
RefSeq ORF:	2829 bp
Locus ID:	56479
UniProt ID:	Q9NR82
Cytogenetics:	6q13
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
MW:	103.4 kDa
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]

Product images:



Circular map for RC228621