OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG228591

KCNQ5 (NM_001160134) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNQ5 (NM_001160134) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KCNQ5
Synonyms:	Kv7.5; MRD46
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG228591 representing NM_001160134
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCCCGCCACCACGCGGGAGGAGAGGAGGGCGGCGCCGCCGGGCTCTGGGTGAAGAGCGGCGCAGCGG
CGGCGGCGGCGGGCGGGGGGCGCTTGGGCAGCGGCATGAAGGATGTGGAGTCCGGCCGGGGCAGGGTGCT
GCTGAACTCGGCAGCCGCCAGGGGCGACGGCCTGCTACTGCTGGGCACCCGCGCGGCCACGCTCGGTGGC
GGCGGCGGTGGCCTGAGGGAGAGCCGCCGGGGCAAGCAGGGGGCCCGGATGAGCCTGCTGGGGAAGCCGC
TCTCTTACACGAGTAGCCAGAGCTGCCGGCGCAACGTCAAGTACCGGCGGGTGCAGAACTACCTGTACAA
CGTGCTGGAGAGACCCCGCGGCTGGGCGTTCATCTACCACGCTTTCGTTTTTCTCCTTGTCTTTGGTTGC
TTGATTTTGTCAGTGTTTTCTACCATCCCTGAGCACACAAAATTGGCCTCAAGTTGCCTCTTGATCCTGG
AGTTCGTGATGATTGTCGTCTTTGGTTTGGAGTTCATCATTCGAATCTGGTCTGCGGGTTGCTGTTGTCG
ATATAGAGGATGGCAAGGAAGACTGAGGTTTGCTCGAAAGCCCTTCTGTGTTATAGATACCATTGTTCTT
ATCGCTTCAATAGCAGTTGTTTCTGCAAAAACTCAGGGTAATATTTTTGCCACGTCTGCACTCAGAAGTC
TCCGTTTCCTACAGATCCTCCGCATGGTGCGCATGGACCGAAGGGGAGGCACTTGGAAATTACTGGGTTC
AGTGGTTTATGCTCACAGCAAGGAATTAATCACAGCTTGGTACATAGGATTTTTGGTTCTTATTTTTTCG
TCTTTCCTTGTCTATCTGGTGGAAAAGGATGCCAATAAAGAGTTTTCTACATATGCAGATGCTCTCTGGT
GGGGCACAATTACATTGACAACTATTGGCTATGGAGACAAAACTCCCCTAACTTGGCTGGGAAGATTGCT
TTCTGCAGGCTTTGCACTCCTTGGCATTTCTTTCTTTGCACTTCCTGCCGGCATTCTTGGCTCAGGTTTT
GCATTAAAAGTACAAGAACAACACCGCCAGAAACACTTTGAGAAAAGAAGGAACCCAGCTGCCAACCTCA
TTCAGTGTGTTTGGCGTAGTTACGCAGCTGATGAGAAATCTGTTTCCATTGCAACCTGGAAGCCACACTT
GAAGGCCTTGCACACCTGCAGCCCTACCAAGAAAGAACAAGGGGAAGCATCAAGCAGAATTATGAAATTT
CATGTTGCAAAACGGAAGTTTAAGGAAACATTACGTCCATATGATGTAAAAGATGTCATTGAACAATATT
CTGCTGGTCATCTGGACATGTTGTGTAGAATTAAAAGCCTTCAAACACGTGTTGATCAAATTCTTGGAAA
AGGGCAAATCACATCAGATAAGAAGAGCCGAGAGAAAATAACAGCAGAACATGAGACCACAGACGATCTC
AGTATGCTCGGTCGGGTGGTCAAGGTTGAAAAACAGGTACAGTCCATAGAATCCAAGCTGGACTGCCTAC
TAGACATCTATCAACAGGTCCTTCGGAAAGGCTCTGCCTCAGCCCTCGCTTTGGCTTCATTCCAGATCCC
ACCTTTTGAATGTGAACAGACATCTGACTATCAAAGCCCTGTGGATAGCAAAGATCTTTCGGGTTCCGCA
CAAAACAGTGGCTGCTTATCCAGATCAACTAGTGCCAACATCTCGAGAGGCCTGCAGTTCATTCTGACGC
CAAATGAGTTCAGTGCCCAGACTTTCTACGCGCTTAGCCCTACTATGCACAGTCAAGCAACACAGGTGCC
AATTAGTCAAAGCGATGGCTCAGCAGTGGCAGCCACCAACACCATTGCAAACCAAATAAATACGGCACCC
AAGCCAGCAGCCCCAACAACTTTACAGATCCCACCTCCTCTCCCAGCCATCAAGCATCTGCCCAGGCCAG
AAACTCTGCACCCTAACCCTGCAGGCTTACAGGAAAGCATTTCTGACGTCACCACCTGCCTTGTTGCCTC
CAAGGAAAATGTTCAGGTTGCACAGTCAAATCTCACCAAGGACCGTTCTATGAGGAAAAGCTTTGACATG
GGAGGAGAAACTCTGTTGTCTGTCTGTCCCATGGTGCCGAAGGACTTGGGCAAATCTTTGTCTGTGCAAA
ACCTGATCAGGTCGACCGAGGAACTGAATATACAACTTTCAGGGAGTGAGTCAAGTGGCTCCAGAGGCAG
CCAAGATTTTTACCCCAAATGGAGGGAATCCAAATTGTTTATAACTGATGAAGAGGTGGGTCCCGAAGAG
ACAGAGACAGACACTTTTGATGCCGCACCGCAGCCTGCCAGGGAAGCTGCCTTTGCATCAGACTCTCTAA
GGACTGGAAGGTCACGATCATCTCAGAGCATTTGTAAGGCAGGAGAAAGTACAGATGCCCTCAGCTTGCC
TCATGTCAAACTGAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

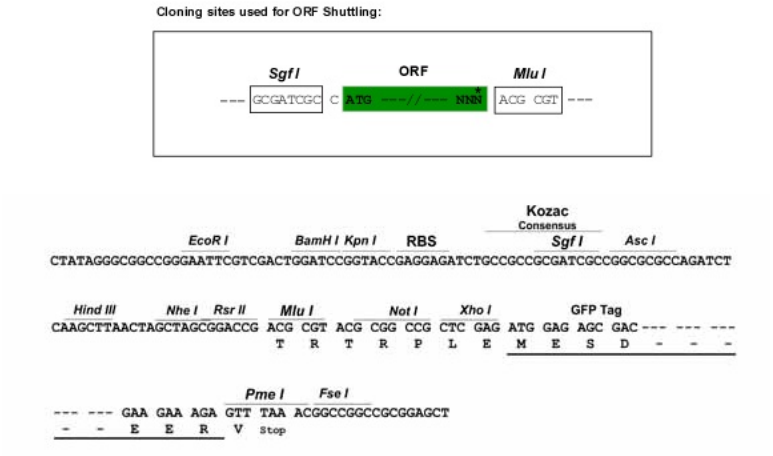
>RG228591 representing NM_001160134
Red=Cloning site Green=Tags(s)

MPRHHAGGEEGGAAGLWVKSGAAAAAAGGGRLGSGMKDVESGRGRVLLNSAAARGDGLLLLGTRAATLGG
GGGGLRESRRGKQGARMSLLGKPLSYTSSQSCRRNVKYRRVQNYLYNVLERPRGWAFIYHAFVFLLVFGC
LILSVFSTIPEHTKLASSCLLILEFVMIVVFGLEFIIRIWSAGCCCRYRGWQGRLRFARKPFCVIDTIVL
IASIAVVSAKTQGNIFATSALRSLRFLQILRMVRMDRRGGTWKLLGSVVYAHSKELITAWYIGFLVLIFS
SFLVYLVEKDANKEFSTYADALWWGTITLTTIGYGDKTPLTWLGRLLSAGFALLGISFFALPAGILGSGF
ALKVQEQHRQKHFEKRRNPAANLIQCVWRSYAADEKSVSIATWKPHLKALHTCSPTKKEQGEASSRIMKF
HVAKRKFKETLRPYDVKDVIEQYSAGHLDMLCRIKSLQTRVDQILGKGQITSDKKSREKITAEHETTDDL
SMLGRVVKVEKQVQSIESKLDCLLDIYQQVLRKGSASALALASFQIPPFECEQTSDYQSPVDSKDLSGSA
QNSGCLSRSTSANISRGLQFILTPNEFSAQTFYALSPTMHSQATQVPISQSDGSAVAATNTIANQINTAP
KPAAPTTLQIPPPLPAIKHLPRPETLHPNPAGLQESISDVTTCLVASKENVQVAQSNLTKDRSMRKSFDM
GGETLLSVCPMVPKDLGKSLSVQNLIRSTEELNIQLSGSESSGSRGSQDFYPKWRESKLFITDEEVGPEE
TETDTFDAAPQPAREAAFASDSLRTGRSRSSQSICKAGESTDALSLPHVKLK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_001160134
ORF Size:	2466 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:
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_001160134.2

RefSeq Size: 6265 bp

RefSeq ORF: 2469 bp

Locus ID: 56479

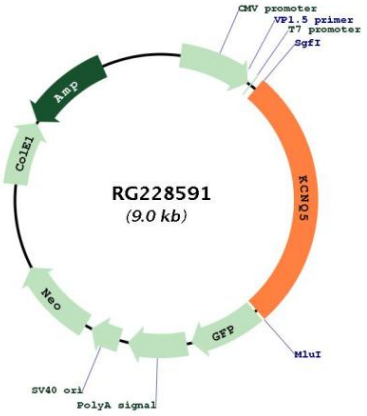
UniProt ID: Q9NR82

Cytogenetics: 6q13

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]

Product images:



Circular map for RG228591