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Product datasheet for RG229040

KCNQ5 (NM_001160130) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNQ5 (NM_001160130) 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)

ORF Nucleotide Sequence:

>RG229040 representing NM_001160130
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCCCGCCACCACGCGGGAGGAGAGGAGGGCGGCGCCGCCGGGCTCTGGGTGAAGAGCGGCGCAGCGG
CGGCGGCGGCGGGCGGGGGGCGCTTGGGCAGCGGCATGAAGGATGTGGAGTCCGGCCGGGGCAGGGTGCT
GCTGAACTCGGCAGCCGCCAGGGGCGACGGCCTGCTACTGCTGGGCACCCGCGCGGCCACGCTCGGTGGC
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TGCCTTTGCATCAGACTCTCTAAGGACTGGAAGGTCACGATCATCTCAGAGCATTTGTAAGGCAGGAGAA
AGTACAGATGCCCTCAGCTTGCCTCATGTCAAACTGAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG229040 representing NM_001160130
Red=Cloning site Green=Tags(s)

MPRHHAGGEEGGAAGLWVKSGAAAAAAGGGRLGSGMKDVESGRGRVLLNSAAARGDGLLLLGTRAATLGG
GGGGLRESRRGKQGARMSLLGKPLSYTSSQSCRRNVKYRRVQNYLYNVLERPRGWAFIYHAFVFLLVFGC
LILSVFSTIPEHTKLASSCLLILEFVMIVVFGLEFIIRIWSAGCCCRYRGWQGRLRFARKPFCVIDTIVL
IASIAVVSAKTQGNIFATSALRSLRFLQILRMVRMDRRGGTWKLLGSVVYAHSKELITAWYIGFLVLIFS
SFLVYLVEKDANKEFSTYADALWWGTITLTTIGYGDKTPLTWLGRLLSAGFALLGISFFALPAGILGSGF
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VTTCLVASKENVQVAQSNLTKDRSMRKSFDMGGETLLSVCPMVPKDLGKSLSVQNLIRSTEELNIQLSGS
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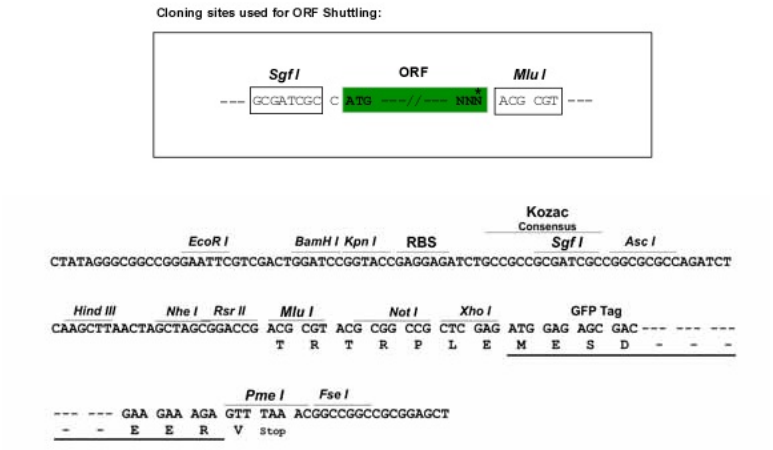
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

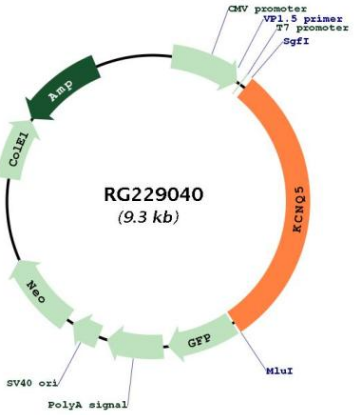
Cloning Scheme:



ACCN: NM_001160130

ORF Size:	2769 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_001160130.2
RefSeq Size:	6568 bp
RefSeq ORF:	2772 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 RG229040