

Product datasheet for **RG222841**

KCNMB2 (NM_181361) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: KCNMB2 (NM_181361) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: KCNMB2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG222841 representing NM_181361
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTTATATGGACCAGTGGCCGGACCTCTTCATCTTATAGACATGATGAAAAAGAAATATTTACCAGA
AAATCAGGGACCATGACCTCCTGGACAAAAGGAAAACAGTCACAGCACTGAAGGCAGGAGAGACCAGC
TATTCTCCTGGGACTGGCTATGATGGTGTGCTCCATCATGATGATTTTCTGCTGGGAATCACACTCCTG
CGCTCATACATGCAGAGCGTGTGGACCGAAGAGTCTCAATGCACCTTCTGAATGCGTCCATCACGGAAA
CATTAACTGCTCCTTCAGCTGTGGTCCAGACTGCTGGAACCTTCTCAGTACCCCTGCCCCAGGTGTA
CGTTAACCTGACTTCTTCCGGGGAAAAGCTCCTCCTCTACCACACAGAAGAGACAATAAAAAATCAATCAG
AAGTGCTCCTATATACCTAAATGTGAAAAAATTTGAAGAATCCATGTCCTGTTGAATGTTGTCATGG
AAAACCTCAGGAAGTATCAACACTTCTCCTGCTATTCTGACCCAGAAGGAAACCAGAAGAGTGTATCCT
AACCAAACCTACAGTTCCAACGTGCTGTTCCATTCACTCTTCTGGCCAACCTGTATGATGGCTGGGGGT
GTGGCAATTGTTGCCATGGTGAACCTTACACAGTACCTCTCCCTACTATGTGAGAGGATCCAACGGATCA
ATAGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG222841 representing NM_181361
Red=Cloning site Green=Tags(s)

MFIWTSGRSSSYRHDEKRNIYQKIRDHLLDKRKTVTALKAGEDRAILLGLAMMVCSIMMYFLLGITLL
RSYMQSVWTEESQCTLLNASITETFNCSFSCGPDCWKL SQYPCLOVYVNL TSSGEKLLL YHTEETIKINQ
KCSYIPKCGKNFEESMSLVNVVMENFRKYQHFSCYSDPEGNQKSVILTKLYSSNVL FHSLFWPTCMMAGG
VAIVAMVKLTQYLSLLCERIQRINR

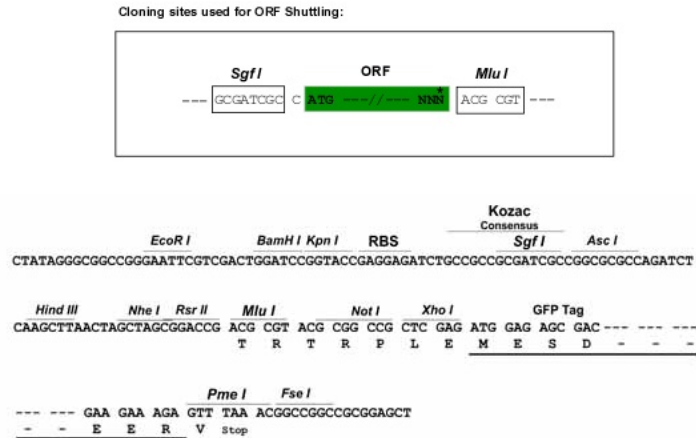
TRTRPLE - GFP Tag - V



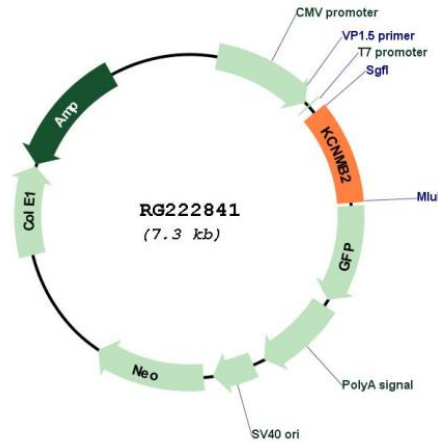
[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_181361

ORF Size: 705 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:	<u>NM_181361.1, NP_852006.1</u>
RefSeq Size:	2543 bp
RefSeq ORF:	708 bp
Locus ID:	10242
UniProt ID:	<u>Q9Y691</u>
Cytogenetics:	3q26.32
Protein Families:	Druggable Genome, Ion Channels: Other, Transmembrane
Protein Pathways:	Vascular smooth muscle contraction
Gene Summary:	MaxiK channels are large conductance, voltage and calcium-sensitive potassium channels which are fundamental to the control of smooth muscle tone and neuronal excitability. MaxiK channels can be formed by 2 subunits: the pore-forming alpha subunit and the modulatory beta subunit. The protein encoded by this gene is an auxiliary beta subunit which decreases the activation time of MaxiK alpha subunit currents. Alternative splicing results in multiple transcript variants of this gene. Additional variants are discussed in the literature, but their full length nature has not been described. [provided by RefSeq, Jul 2013]