

Product datasheet for RG218687

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

OriGene Technologies, Inc.

KCNMB1 (NM_004137) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: KCNMB1 (NM_004137) Human Tagged ORF Clone

Tag: TurboGFP Symbol: KCNMB1

Synonyms: BKbeta1; hbeta1; hslo-beta; K(VCA)beta; k(VCA)beta-1; SLO-BETA; slo-beta-1

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG218687 representing NM_004137

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGTGAAGAAGCTGGTGATGGCCCAGAAGCGGGGAGAGACACGAGCCCTTTGCCTGGGTGTAACCATGG
TGGTGTGTGCCGTCATCACCTACTACCATCCTGGTCACGACTGTGCCCCCTCTACCAGAAAAGCGTGTG
GACCCAGGAATCCAAGTGCCACCTGATTGAGACCAACATCAGGGACCAGGAGGAGCTGAAGGGCAAGAAG
GTGCCCCAGTACCCATGCCTGTGGGTCAACGTGTCAGCTGCCGGCAGGTGGGCTGTGCTGTACCACACGG
AGGACACTCGGGACCAGAACCAGCAGTGCTCCTACATCCCAGGCAGCGTGGACAATTACCAGACGGCCCG
GGCCGACGTGGAGAAGCCAGAATTCCAAGAGCAGCAGGTCTTCTACTGCTTCTCCCCACCTCGG
GGGAACGAAACCAGCGTCCTATTCCAGCGCCTCTACGGGCCCCAGGCCCTCCTCTTCTCCCTCTTCTGGC
CCACCTTCCTGCTGACCGGTGGCCTCCTCATTATCGCCATGGTGAAGAGCAACCAGTACCTGTCCATCCT

GGCGGCCCAGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG218687 representing NM_004137

Red=Cloning site Green=Tags(s)

MVKKLVMAQKRGETRALCLGVTMVVCAVITYYILVTTVLPLYQKSVWTQESKCHLIETNIRDQEELKGKK VPQYPCLWVNVSAAGRWAVLYHTEDTRDQNQQCSYIPGSVDNYQTARADVEKVRAKFQEQQVFYCFSAPR

GNETSVLFQRLYGPQALLFSLFWPTFLLTGGLLIIAMVKSNQYLSILAAQK

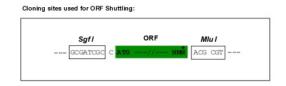
TRTRPLE - GFP Tag - V

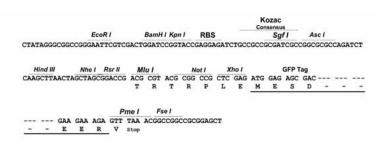
Restriction Sites: Sgfl-Mlul



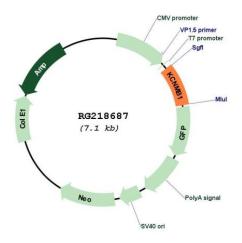


Cloning Scheme:





Plasmid Map:



ACCN: NM_004137

ORF Size: 573 bp



OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>

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.

RefSeg: NM 004137.4

RefSeq Size: 1518 bp
RefSeq ORF: 576 bp
Locus ID: 3779
UniProt ID: Q16558

Cytogenetics: 5q35.1

Domains: CaKB

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 product of

this gene, the modulatory beta subunit. Intracellular calcium regulates the physical association between the alpha and beta subunits. [provided by RefSeq, Jul 2008]