

## Product datasheet for **RG218687**

### 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 Sequence:** >RG218687 representing NM\_004137  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGTGAAGAAGCTGGTGATGGCCAGAAGCGGGGAGAGACACGAGCCCTTTGCCTGGGTGTAACCATGG  
 TGGTGTGTGCCGTCATCACCTACTACATCCTGGTCAGACTGTGCTGCCCTCTACCAGAAAAGCGTGTG  
 GACCCAGGAATCCAAGTGCCACCTGATTGAGACCAACATCAGGGACCAGGAGGAGCTGAAGGCAAGAAG  
 GTGCCCCAGTACCATGCCTGTGGTCAACGTGTCAGCTGCCGGCAGGTGGGCTGTGCTGTACCACGG  
 AGGACTCGGGACCAGAACCAGCAGTGCTCCTACATCCCAGGCAGCGTGGACAATTACCAGACGGCCCG  
 GGCCGACGTGGAGAAGGTGAGAGCCAAATTCAGAGCAGCAGGTCTTCTACTGCTTCTCCGACCTCGG  
 GGAACGAAACCAGCGTCTATTCCAGCGCCTCTACGGGCCCCAGGCCCTCTTCTCCCTCTTCTGGC  
 CCACCTTCTGCTGACCGGTGGCCTCCTCATTATCGCCATGGTGAAGAGCAACCAGTACCTGTCCATCCT  
 GGCGGCCAGAAG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG218687 representing NM\_004137  
 Red=Cloning site Green=Tags(s)

MVKKLVAQKRGETRALCLGVTMVVCAVITYYILVTTVLPLYQKSVWTQESKCHLIETNIRDQEELKGGK  
 VPQYPCLWVNVSAAGRWAFLYHTEDTRDQNCQCSYIPGSVDNYQTARADVEKVRAKFQEQQVFYCFSA  
 PRRNETSVLFRQLYGPQALLFSLFWPTFLLTGGLLIAMVKSNOYLSILAAQK

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI





<b>OTI Disclaimer:</b>	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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_004137.4</a>
<b>RefSeq Size:</b>	1518 bp
<b>RefSeq ORF:</b>	576 bp
<b>Locus ID:</b>	3779
<b>UniProt ID:</b>	<a href="#">Q16558</a>
<b>Cytogenetics:</b>	5q35.1
<b>Domains:</b>	CaKB
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Other, Transmembrane
<b>Protein Pathways:</b>	Vascular smooth muscle contraction
<b>Gene Summary:</b>	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]