

Product datasheet for **SC108188**

KCNMB4 (NM_014505) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNMB4 (NM_014505) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNMB4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC108188 sequence for NM_014505 edited (data generated by NextGen Sequencing)

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ATGGCGAAGCTCCGGGTGGCTTACGAGTACACGGAAGCCGAGGACAAGAGCATCCGGCTC
GGCTTGTTCATCATCTCCGGCGTCGTGTCGCTCTTCATCTTCGGCTTCTGCTGGCTG
AGTCCCGCGCTGCAGGATCTGCAAGCCACGGAGGCCAATTGCACGGTGTGTCGGTGCA
CAGATCGGCGAGGTGTTGAGTGCACCTTACCTGTGGCGCCGACTGCAGGGGCACCTCG
CAGTACCCTGCGTCCAGGTCTACGTGAACAACCTGAGTCCAACCTAGGGCGCTGCTG
CACAGCGACGAGCACCAGCTCCTGACCAACCCCAAGTGCCTATATCCCTCCCTGTAAG
AGAGAAAATCAGAAGAATTTGGAAAGTGTATGAATTGGCAACAGTACTGGAAAGATGAG
ATTGGTCCCAGCCATTTACTTGCTATTTAATCAACATCAAAGACCAGATGATGTGCTT
CTGCATCGCACTCATGATGAGATTGCTCCTCCTGCATTGCTTCTCTGGCCCTGGTGACA
TTTGTGGTGGGCGTTCTCATTGTGGTCCTGACCATCTGTGCCAAGAGCTTGGCGGTCAAG
GCGGAAGCCATGAAGAAGCGCAAGTTCTCTTAA
```

Clone variation with respect to NM_014505.5



[View online »](#)

5' Read Nucleotide Sequence: >OriGene 5' read for NM_014505 unedited
TACGACTTACTATAGGGCGGCCGGAATTCGGCACGAGGCGGGCGGTGGCGGGCGG
CTCCTCCC GCCGAGG CAGTCGGCTCGGCGCCGGGGCGGGAGGGGGCGGGGAGCAC
GCCAGCCGCCGAGAGTGGGGGGCGATGGCGAAGCTCCGGGTGGCTTACGAGTACACGGAA
GCCGAGGACAAGAGCATCCGGCTCGGCTGTTTCTCATCATCTCCGGCGTCGTGTCGCTC
TTCATCTTCGGCTTCTGCTGGCTGAGTCCCGCGCTGCAGGATCTGCAAGCCACGGAGGCC
AATTGCACGGTGTGTCGGTGCAGCAGATCGGCGAGGTGTTTCGAGTGCACCTTCACCTGT
GGCGCCGACTGCAGGGGACCTCGCAGTACCCCTGCGTCCAGGTCTACGTGAACAACTCT
GAGTCCAACCTCTAGGGCGCTGCTGCACAGCAGCAGCACCAGCTCCTGACCAACCCCAAG
TGCTCCTATATCCCTCCCTGTAAGAGAGAAAAATCAGAAGAATTTGGAAAGTGCATGAAT
TGGCAACAGTACTGAAAGATGAGATTGGTTCCAGCCATTTACTTGCTATTTTAATCAA
CATCAAAGACCAGATGATGTGCTTCTGCATCGCACTCATGATGAGATTGCCTCCTGCAT
TGCTTCTCTGGCCCTGGTGACATTTGTGGTGGGCGTCTCTATTGGTGGTCTGACCA
TCTGTGCCAAGAGCTTGGCGGTCAAGGCGGAAGCCATGAAGAAGCGCCAGTTCTCTTAAA
GGGGGAGGGAGGGCTGTANAAAGCANAGTACAGAAAGCTGTACTCATCGNCACGCGTCCA
CCTGNCGAACCTGTGTTNCTGGCGCAGAAATNGCCAGGNCCCNACAGNCTCTGAGA
GGCTCATCCCTCAGTGGCACAGAAACAGGCCAACTGNGAGACTTGAACCTCAAAGCTGNA
TTCTCTGCTGAGCATGG

3' Read Nucleotide Sequence: >OriGene 3' read for NM_014505 unedited
CTTATTTTATATTTTTAAGTAGCATAAATCATAATGGTTTGTATACTACACTGTACAAAT
AATATACTGTTACTTTTGAAGAAATGAACTTCTTATTAGGGTTTTCTGAAAATAGTTAC
TCCATACAGCTAAGATCTTGACCCTTTAGCCATTGCTACAGCAGATGGAATACAAGCTTT
GAGGTTCCAAGTCTTCCAGTTGTGCCTGTTTCTGTTGCCACTGAGGGATGAGCCTCTCAG
AGCCCTGTGTCGGCCCTGTCCATCTCCTGCGCCAGGAAACACAGTTCCGCGAGTGGACG
CGTGCCGATGAGTACAGCTTCTGTACTTTGCTTTCTACAAGCCTCCTTCCCCTTTAAGAG
AACTTGGCCTTCTTCATGGCTTCCGCCTTGACCGCCAAGCTCTTGGCACAGATGGTCAGG
ACCACAATGAGAACGCCACCACAAATGTCACCAGGGGCCAGAGGAAGCAATGCAGGAGG
ACAATCTCATCATGAGTGCATGCAGAAGCACATCATCTGGTCTTTGATGTTGATTAATA
TAGCAAGTAAATGGCTGGGAACCAATCTCATCTTCCAGTACTGTTGCCAATTCATGACA
CTTTCAAATTTCTGATTTTCTCTTACAGGGAGGGATATAGGAGCACTTGGCGCTG
GTCAGGAGCTGGTGTGTCGCTGTCAGCAGCGCCCTAAAGTTGGACTCAGAGTTGTCA
CGTAAACCTGGACCAAGGTAAGTGCAGTGCATCNGCCCCCAGGTGAAGTGCA
CTCGAACACCTTGCCAACCTGCTTGACCGCAGTACCGTGCATTGGCCTTCGTGGCTTGCAN
ATCCTGCACGCGGACTTANCCAGCAAAGCCANATGATAACGACCCACCCCGGAATGATG
AAACACAGCCAGCCGATGCTCTTGCCTCGGTTCCGGTACTTCGAACCACCGGACTTTCCC
ATGCCCAATTCTGGGGTGGTGGTCCCCCGCCCTTCCCN

Restriction Sites: EcoRI-NOT
ACCN: NM_014505
Insert Size: 1280 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 custsupport@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. [More info](#)

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_014505.4](#), [NP_055320.4](#)

RefSeq Size: 1631 bp

RefSeq ORF: 633 bp

Locus ID: 27345

UniProt ID: [Q86W47](#)

Cytogenetics: 12q15

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 modulatory beta subunit. The protein encoded by this gene is an auxiliary beta subunit which slows activation kinetics, leads to steeper calcium sensitivity, and shifts the voltage range of current activation to more negative potentials than does the beta 1 subunit. [provided by RefSeq, Jul 2008]