

Product datasheet for RC217636

KCNMB3 (NM_171829) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNMB3 (NM_171829) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNMB3
Synonyms:	BKBETA3; HBETA3; K(VCA)BETA-3; KCNMB2; KCNMBL; SLO-BETA-3; SLOBETA3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217636 representing NM_171829 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACAGCCTTTCCTGCCTCAGGGAAGAAGAGAGACAGACTACAGTGATGGAGACCCACTAGATGTGC
ACAAGAGGCTGCCATCCAGTGCTGGAGAGGACCGAGCCGTGATGCTGGGGTTTGCCATGATGGGCTTCTC
AGTCCTAATGTTCTTCTTGCTCGGAACAACCATTCTAAAGCCTTTATGCTCAGCATTAGAGAGAAGAA
TCGACCTGCACTGCCATCCACAGATATCATGGACGACTGGCTGGACTGTGCCTCACCTGTGGTGTGC
ACTGCCACGGTCAGGGGAAGTACCGTGTCTTCAGGTGTTTGTGAACCTCAGCCATCCAGGTCAGAAAGC
TCTCTACATTATAATGAAGAGGCTGTCCAGATAAATCCCAAGTCTTTACACACCTAAGTGCCACCAA
GATAGAAATGATTTGCTCAACAGTGCTCTGGACATAAAAAGAATCTTCGATCACAAAAATGGAACCCCT
TTTCATGCTTCTACAGTCCAGCCAGCCAATCTGAAGATGTCATTCTTATAAAAAAGTATGACCAATGGC
TATCTTCCACTGTTTATTTGGCCTTCACTGACTCTGCTAGGTGGTGCCTGATTGTTGGCATGGTGA
TTAACACAACCTGTCTTACTGTGTGAAAAATATAGCACTGTAGTCAGAGATGAGGTAGGTGAAAAAG
TACCTTATATAGAACAGCATCAGTTCAAAGTGTGCATTATGAGGAGGAGCAAAGGAAGAGCAGAGAAATC
T

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC217636 representing NM_171829
Red=Cloning site Green=Tags(s)

MTAFPASGKKRETDYSDGDPLDVHKRLPSSAGEDRAVMLGFAMMGFSVLMFFLLGTTILKPFMLS IQREE
 STCTAIHTDIMDDWLDCAFTCGVHCHGQKYPCLQVFNLSHPGQKALLHYNEEAVQINPKCFYTPKCHQ
 DRNDLLNSALDIKEFFDHKNGTPFSCFYSPASQSEDEVILIKKYDQMAIFHCLFWPSLTLGGALIVGMVR
 LTQHLSLLCEKYSTVVRDEVGGKVPYIEQHFKLCIMRRSKGRAEKS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6489_d02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_171829

ORF Size: 771 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_171829.2](#)

RefSeq Size: 1709 bp

RefSeq ORF: 774 bp

Locus ID: 27094

UniProt ID: [Q9NPA1](#)

Cytogenetics: 3q26.32

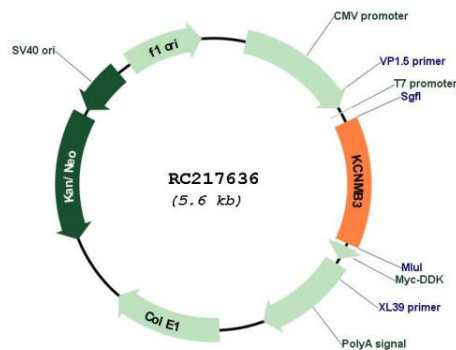
Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

Protein Pathways: Vascular smooth muscle contraction

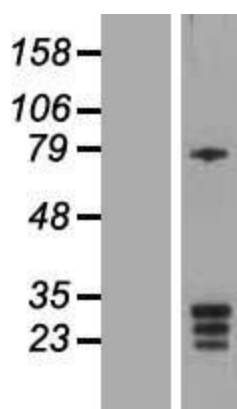
MW: 28.9 kDa

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 may partially inactivate or slightly decrease the activation time of MaxiK alpha subunit currents. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 22. [provided by RefSeq, Jul 2009]

Product images:



Circular map for RC217636



Western blot validation of overexpression lysate (Cat# [LY406785]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217636 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).