

## Product datasheet for **RC228110**

### KCNMB3 (NM\_001163677) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KCNMB3 (NM_001163677) 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:	>RC228110 representing NM_001163677 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**

ATGCAGCCCTTCAGCATCCCCGTGCAAATCACACTTCAGGGCAGCCGGAGGCGCCAGGGGAGGACAGCCT  
TTCCTGCCTCAGGAAGAAGAGAGACAGACTACAGTGATGGAGACCCACTAGATGTGCACAAGAGGCT  
GCCATCCAGTGCTGGAGAGGACCGAGCCGTGATGCTGGGGTTTGCCATGATGGGCTTCTCAGTCCTAATG  
TTCTTCTTGCTCGGAACAACATTCTAAAGCCTTTATGCTCAGCATTACAGAGAAGAATCGACCTGCA  
CTGCCATCCACAGATATCATGGACGACTGGCTGGAGTGTGCCTTCACCTGTGGTGTGCACTGCCACGG  
TCAGGGGAAGTACCCGTGTCTTCAGGTGTTGTGAACCTCAGCCATCCAGGTGAGAAAGCTCTCCTACAT  
TATAATGAAGAGGCTGTCCAGATAAATCCCAAGCGTGATGTTACAGACTGCAGAGTTAAAGAAAAGCAGA  
CATTGACAGTTTCTGATGAGCATAAACAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC228110 representing NM_001163677 Red=Cloning site Green=Tags(s)
-------------------	---

MQPFSIPVQITLQGSRRRQGRATFPASGKKRETDYSDGDPLDVHKRLPSSAGEDRAVMLGFAMMGFSVLM  
FFLLGTTILKPFMLSIQREESTCTAIHTDIMDDWLDCAFTCGVHCHGQKYPCLQVFNLSHPGQKALLH  
YNEEAVQINPKRDVTDRCVKEKQTLTVSDEHKQ

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:	<a href="https://cdn.origene.com/chromatograms/ja1457_e03.zip">https://cdn.origene.com/chromatograms/ja1457_e03.zip</a>
----------------	---



[View online »](#)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001163677

**ORF Size:** 519 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\\_001163677.1](#), [NP\\_001157149.1](#)

**RefSeq ORF:** 522 bp

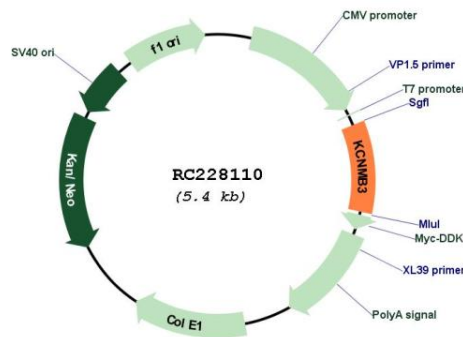
**Locus ID:** 27094

**UniProt ID:** [Q9NPA1](#)

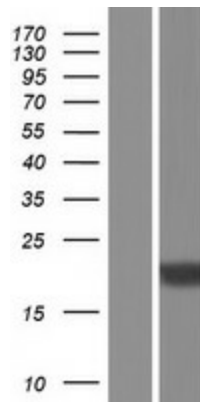
**Cytogenetics:** 3q26.32

Protein Families:	Druggable Genome, Ion Channels: Other, Transmembrane
Protein Pathways:	Vascular smooth muscle contraction
MW:	19.3 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 RC228110



Western blot validation of overexpression lysate (Cat# [LY431138]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228110 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).