

## Product datasheet for **RC233460**

### KCNMA1 (NM\_001271520) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KCNMA1 (NM_001271520) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNMA1
Synonyms:	bA205K10.1; BKTM; CADEDS; hSlo; IEG16; KCa1.1; LIWAS; MaxiK; mSLO1; PNKD3; SAKCA; SLO; SLO-ALPHA; SLO1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC233460 representing NM_001271520 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAAATGGTGGCGGCGGCGGCGGCGGCGAGCAGCGGCGGCGGCGGCGGCGGCGGAGGCAGCAGTCTTA  
GAATGAGTAGCAATATCCACGCGAACCCTCAGCCTAGACGCGTCTCCTCCTCCTCCTCCTCCTCTTCT  
CTCTTCTTCTTCTCCTCCTCCTCTTCTCCTCGTCTCGGTCCACGAGCCCAAGATGGATGCGCTCATC  
ATCCCGGTGACCATGGAGGTGCCGTGCGACAGCCGGGCAACGCATGTGGTGGGCTTCTGCGCTCCT  
CCATGGTGACTTTCTCGGGGCTCTTCATCATCTTGCTCTGGCGGACGCTCAAGTACCTGTGGACCGT  
GTGCTGCCACTGCGGGGCAAGACGAAGGTTGTTGGCGGCTGCGGCTGGGCGGGGTGGGGACTCAC  
AGGCTCGGGTGCCGTGGTGGGGTGGGGACAGCCAACCTCAGCGGGACGGAGGAAGCTGGGGGAGCTG  
GGTGCCTGTTTTGCACCCTCACCTGCCGGGCTCGGCTCCTGGCGGTGGGCGAGAGGGAGCACATCCGC  
CCATACTTTAGGAACCTGTTGGGAGATGAGTTCGTGGGTGAGAAAGAAGGAAAAATCCTTTGGGCAA  
GGGAGAGAA

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA



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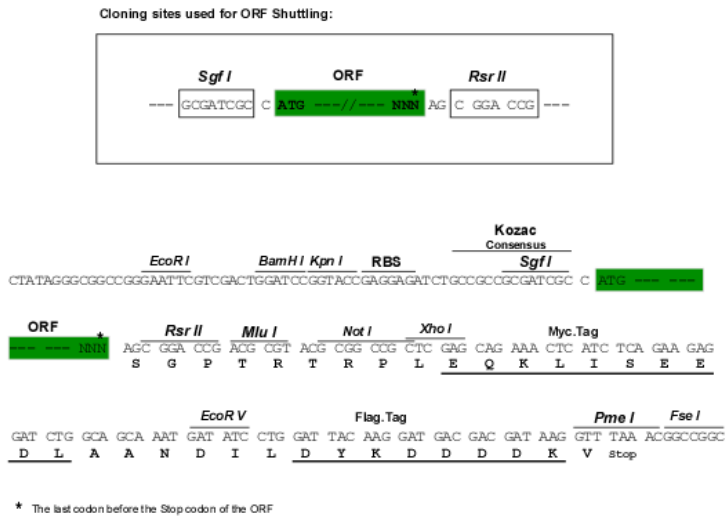
**Protein Sequence:** >RC233460 representing NM\_001271520  
 Red=Cloning site Green=Tags(s)

MANGGGGGGGSSGGGGGGSSLRMSSNIHANHLSLDASSSSSSSSSSSSSSSSSSSSSVHEPKMDALI  
 IPVTMEVPCDSRGQRMWAWFLASSMVTFFGGFLFIILLWRTLKYLWTVCCCHCGGKTKGCWRLRLGPGSGTH  
 RLGCRGAGWGQPTQRGRRLGAAGCVFCTAHLPLGLGSWRWARGSTSHTLGTGCGDEFVGSERREKSFQ  
 GRE

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_001271520

**ORF Size:** 639 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\\_001271520.2](#)

**RefSeq Size:** 1385 bp

**RefSeq ORF:** 642 bp

**Locus ID:** 3778

**Cytogenetics:** 10q22.3

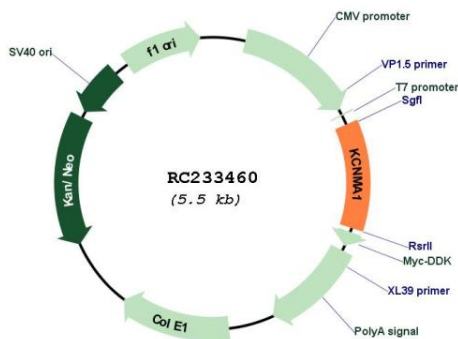
**Protein Families:** Druggable Genome, Ion Channels: Potassium, Transmembrane

**Protein Pathways:** Vascular smooth muscle contraction

**MW:** 22.6 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, which is the product of this gene, and the modulatory beta subunit. Intracellular calcium regulates the physical association between the alpha and beta subunits. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC233460