

## Product datasheet for RC228657

### KCNMA1 (NM\_001161352) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KCNMA1 (NM_001161352) 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:	>RC228657 representing NM_001161352 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RC228657 representing NM\_001161352  
 Red=Cloning site Green=Tags(s)

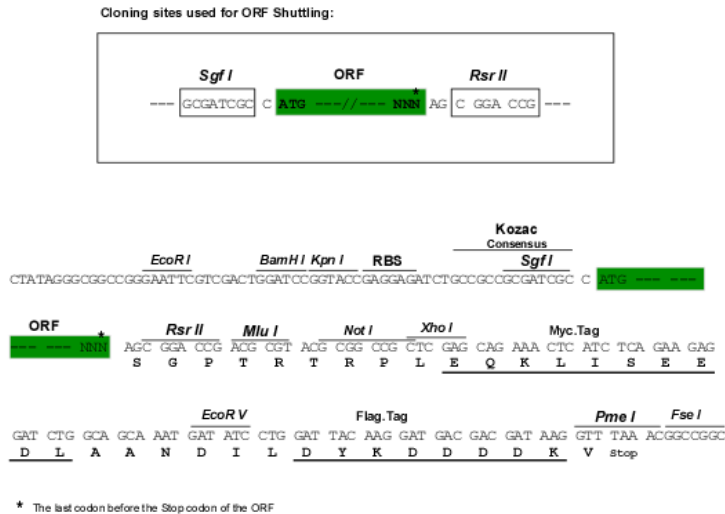
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SGPTRRRLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk8007\\_a02.zip](https://cdn.origene.com/chromatograms/mk8007_a02.zip)

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM\_001161352

ORF Size: 3708 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](mailto: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](#)

**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\\_001161352.2](#)

**RefSeq ORF:** 3711 bp

**Locus ID:** 3778

**UniProt ID:** [Q12791](#)

**Cytogenetics:** 10q22.3

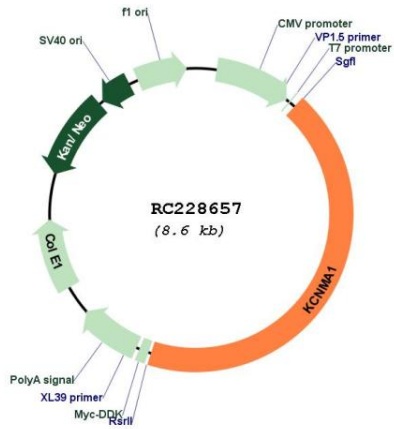
**Protein Families:** Druggable Genome, Ion Channels: Potassium, Transmembrane

**Protein Pathways:** Vascular smooth muscle contraction

**MW:** 137.4 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 RC228657