

## Product datasheet for **RG233349**

### **KCNMA1 (NM\_001271522) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** KCNMA1 (NM\_001271522) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**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-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG233349 representing NM\_001271522  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGCAAATGGTGGCGGGCGGCGGCGGCGAGCAGCGGGCGGCGGCGGCGGCGGAGGCAGCAGTCTTA  
GAATGAGTAGCAATATCCACGCGAACCATCTCAGCCTAGACGCGTCTCTCTCTCTCTCTCTCTCTCT  
CTCTTCTTCTTCT  
ATCCCGGTGACCATGGAGGTGCCGTGCGACAGCCGGGCAACGCATGTGGTGGGCTTCTCTGGCCTCCT  
CCATGGTGACTTCTCTGGGGGCTCTTCATCATCTTGCTCTGGCGGACGCTCAAGTACCTGTGGACCGT  
GTGCTGCCACTGCGGGGCAAGACGAAGGCCACCACTTTGGGTCCCCGAAATGCCACCAGCAGCGCGG  
AGCTGGAGCGGGAGTCCGCTGAGGCCGGTTTTACGCGGAGCGTCTTCCCTGGCGCTCGAGGTGGCTA  
GATGTCGTCGGCTT

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG233349 representing NM\_001271522  
Red=Cloning site Green=Tags(s)

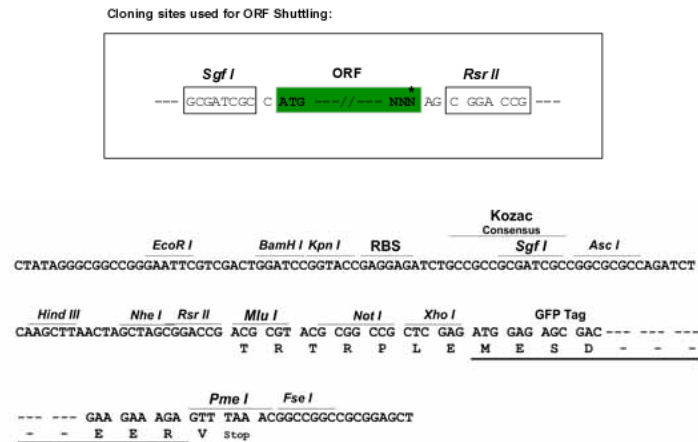
MANGGGGGGGSSGGGGGGSSLRMSSNIHANHLSLDASSSSSSSSSSSSSSSSSSSSSSVHEPKMDALI  
IPVTMEVPCDSRGQRMWAF LASSMVTFFGGLFIILLWRTLKYLWTVCCCHCGGKTKATHFGSPMPAAR  
SWSGSPPEAAVLRGASSLALEVARCRRL

SGPTRRRLE - GFP Tag - V



Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM\_001271522

ORF Size: 504 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\\_001271522.2](#)

RefSeq Size: 882 bp

RefSeq ORF: 507 bp

Locus ID: 3778

UniProt ID: [Q12791](#)

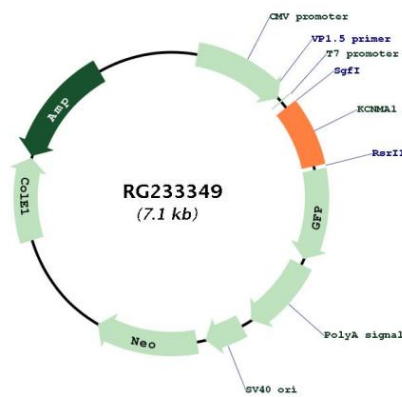
**Cytogenetics:** 10q22.3

**Protein Families:** Druggable Genome, Ion Channels: Potassium, 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, 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 RG233349