

Product datasheet for SC333061

OriGene Technologies, Inc.

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KCNMA1 (NM_001271520) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: KCNMA1 (NM_001271520) Human Untagged Clone

Tag: Tag Free Symbol: KCNMA1

Synonyms: bA205K10.1; BKTM; CADEDS; hSlo; IEG16; KCa1.1; LIWAS; MaxiK; mSLO1; PNKD3; SAKCA; SLO;

SLO-ALPHA; SLO1

Vector: pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC333061 representing NM_001271520.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

 $\mathsf{TTTGGGCAAGGGAGAATAA}$

Restriction Sites: Sgfl-Rsrll

ACCN: NM_001271520

Insert Size: 642 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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: <u>NM 001271520.1</u>

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: 22.2 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]

Transcript Variant: This variant (7) is a two-exon transcript with a distinct 3' UTR compared to variant 1. The predicted protein (short1) has a distinct C-terminus and is significantly shorter

than isoform a. It is unknown if this protein is stable or has any function.