

Product datasheet for **SC327288**

KCNMA1 (NM_001161353) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNMA1 (NM_001161353) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNMA1
Synonyms:	bA205K10.1; BKTM; CAEDDS; hSlo; IEG16; KCa1.1; LIWAS; MaxiK; mSLO1; PNKD3; SAKCA; SLO; SLO-ALPHA; SLO1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001161353, the custom clone sequence may differ by one or more nucleotides

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ATGGCAAATGGTGGCGGGCGGGCGGGCGGCGAGCAGCGGGCGGGCGGGCGGGCGGGAGGC
AGCAGCTTAGAATGAGTAGCAATATCCACGCGAACCATCTCAGCCTAGACGCGTCTCC
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ACTCAGGTGGAATTTTATCAGGGTTCCTCAATCCACATGATCTTGCAAGAGTCAAG

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ATAGAGTCAGCAGATGCATGCCTGATCCTTGCCAACAAGTACTGCGCTGACCCGGATGCC
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 TCCTCCAGCAAGAAGAGCTCCTCTGTTCACTCCATCCCATCCACAGCAAACCGACAGAAC
 CGGCCAAAGTCCAGGGAGTCCCGGGACAACAGAAGTACGTGCAGGAAGAGCGGCTT

- Restriction Sites:** Please inquire
- ACCN:** NM_001161353
- 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_001161353.1](#), [NP_001154825.1](#)

RefSeq Size: 6243 bp

RefSeq ORF: 3660 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]
Transcript Variant: This variant (4) differs in the 3' UTR and has multiple coding region differences, compared to variant 1. The resulting isoform (d) contains a distinct C-terminus, compared to isoform a.