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Product datasheet for RC233349

KCNMA1 (NM_001271522) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNMA1 (NM_001271522) 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:

>RC233349 representing NM_001271522
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAAATGGTGGCGGCGGCGGCGGCGGCAGCAGCGGCGGCGGCGGCGGCGGCGGAGGCAGCAGTCTTA
GAATGAGTAGCAATATCCACGCGAACCATCTCAGCCTAGACGCGTCCTCCTCCTCCTCCTCCTCTTC
CTCTTCTTCTTCTTCCTCCTCCTCTTCCTCCTCGTCCTCGGTCCACGAGCCCAAGATGGATGCGCTCATC
ATCCCGGTGACCATGGAGGTGCCGTGCGACAGCCGGGGCCAACGCATGTGGTGGGCTTTCCTGGCCTCCT
CCATGGTGACTTTCTTCGGGGGCCTCTTCATCATCTTGCTCTGGCGGACGCTCAAGTACCTGTGGACCGT
GTGCTGCCACTGCGGGGGCAAGACGAAGGCCACCCACTTTGGGTCCCCGGAAATGCCACCAGCAGCGCGG
AGCTGGAGCGGGAGTCCGCCTGAGGCCGCGGTTTTACGCGGAGCGTCTTCCCTGGCGCTCGAGGTGGCTA
GATGTCGTCGGCTT

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC233349 representing NM_001271522
Red=Cloning site Green=Tags(s)

MANGGGGGGGSSGGGGGGGGSSLRMSSNIHANHLSLDASSSSSSSSSSSSSSSSSSSSVHEPKMDALI
IPVTMEVPCDSRGQRMWWAFLASSMVTFFGGLFIILLWRTLKYLWTVCCHCGGKTKATHFGSPEMPPAAR
SWSGSPPEAAVLRGASSLALEVARCRRL

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

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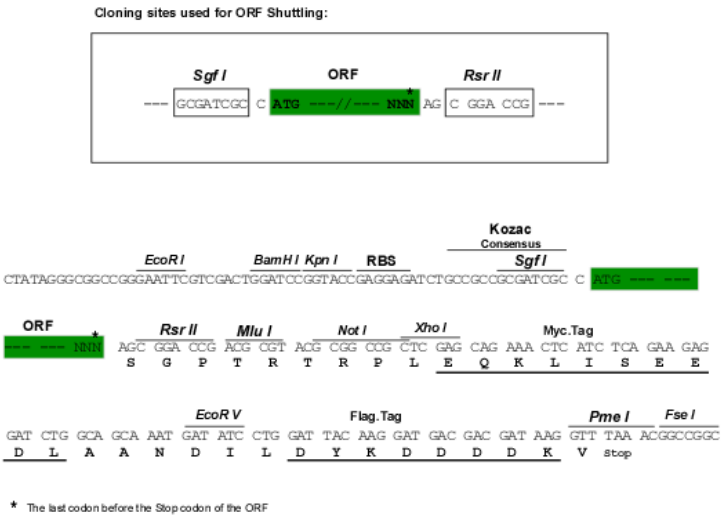
Restriction Sites: SgfI-RsrII

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

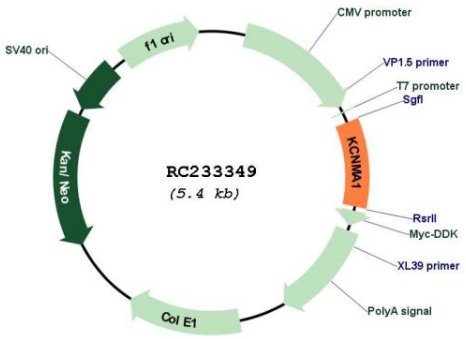
RefSeq ORF: 507 bp

Locus ID: 3778

UniProt ID: Q12791

Cytogenetics:	10q22.3
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
Protein Pathways:	Vascular smooth muscle contraction
MW:	17.6 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 RC233349