

Product datasheet for **RC204246**

KCNE4 (NM_080671) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: KCNE4 (NM_080671) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: KCNE4
Synonyms: MIRP3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC204246 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGAAAATGGAGCCTCTGAACAGCACGCACCCGGCACCGCCGCTCCAGCAGCCCCCTGGAGTCCC
GTGCGGCCGGTGGCGGCAGCGCAATGGCAACGAGTACTTCTACATTCTGGTTGTCATGTCCTTCTACGG
CATTTTCTTGATCGGAATCATGCTGGGCTACATGAAATCCAAGAGCGGGAGAAGAAGTCCAGCCTCCTG
CTGCTGTACAAAGACGAGGAGCGGCTCTGGGGGAGGCCATGAAGCCGCTGCCCGTGGTGTCTGGGCTGA
GGTCGGTGCAGGTGCCCTGATGCTGAACATGCTGCAGGAGAGCGTGGCGCCCGCTGCTCTGCACCCCT
CTGTTCCATGGAAGGGGACAGCGTGAGCTCCGAGTCCCTCCTCCCGGACGTGCACCTCACCATTAGGAG
GAGGGGGCAGACGAGGAGCTGGAGGAGCCTCGGAGACGCCCTCAACGAGAGCAGCGAAGGGTCTCGG
AGAACATCCATCAGAATTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204246 protein sequence
Red=Cloning site Green=Tags(s)

MLKMEPLNSTHPGTAASSSPLESRAAGGGSGNGNEYFYILVVMSEFYGIFLIGIMLGYMKSKRREKSSLL
LLYKDEERLWGEAMKPLPVVSGLRVQVPLMLNMLQESVAPALSTLCSMEGDSVSESSSPDVHLTIQE
EGADEELEETSETPLNESSEGSSENIHQNS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

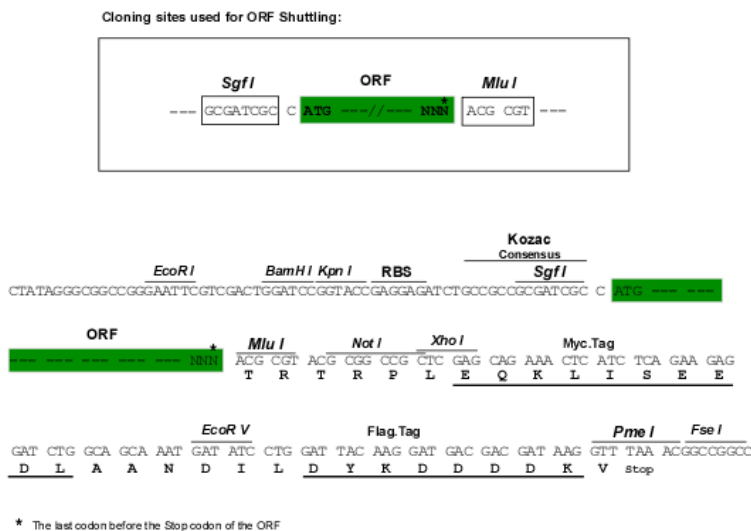
Chromatograms: https://cdn.origene.com/chromatograms/mk6059_f01.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_080671

ORF Size: 510 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_080671.1](#), [NP_542402.1](#)

RefSeq Size: 3190 bp

RefSeq ORF: 513 bp

Locus ID: 23704

UniProt ID: [Q8WWG9](#)

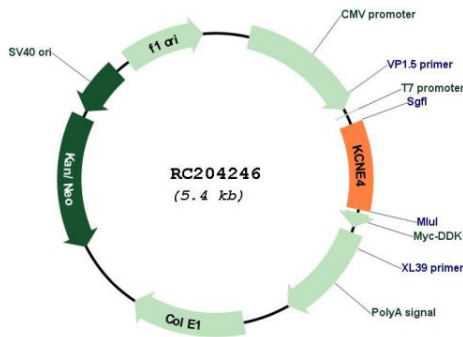
Cytogenetics: 2q36.1

Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

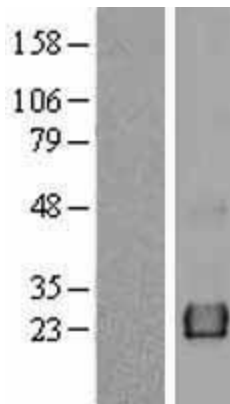
MW: 18.4 kDa

Gene Summary: Voltage-gated potassium (Kv) channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. This gene encodes a member of the potassium channel, voltage-gated, isk-related subfamily. This member is a type I membrane protein, and a beta subunit that assembles with a potassium channel alpha-subunit to modulate the gating kinetics and enhance stability of the multimeric complex. This gene is prominently expressed in the embryo and in adult uterus. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC204246



Western blot validation of overexpression lysate (Cat# [LY403312]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204246 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).