

## Product datasheet for RC211320

### KCNE2 (NM\_172201) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** KCNE2 (NM\_172201) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** KCNE2  
**Synonyms:** ATFB4; LQT5; LQT6; MIRP1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC211320 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCTACTTTATCCAATTTACACAGACGCTGGAAGACGTCTCCGAAGGATTTTATTACTTATATGG  
ACAATTGGCGCCAGAACACAACAGCTGAGCAAGAGGCCCTCAAGCCAAAGTTGATGCTGAGAACTTCTA  
CTATGTCATCCTGTACCTCATGGTGATGATTGGAATGTTCTCTTTCATCATCGTGGCCATCCTGGTGAGC  
ACTGTGAAATCCAAGAGACGGGAACACTCCAATGACCCCTACCACAGTACATTGTAGAGGACTGGCAGG  
AAAAGTACAAGAGCCAAATCTTGAATCTAGAAGAATCGAAGGCCACCATCCATGAGAACATTGGTGCGGC  
TGGGTTCAAATGTCCCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC211320 protein sequence  
Red=Cloning site Green=Tags(s)  
MSTLSNFTQTLEDVFRRIFFITYMDNWRQNTTAEQEALQAKVDAENFYVILYLMVMIGMFSFIIVAILVS  
TVKSKRREHSNDPYHQYIVEDWQEKYKSQILNLEESKATIHENIGAAGFKMSP

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6131\\_b09.zip](https://cdn.origene.com/chromatograms/mk6131_b09.zip)

**Restriction Sites:** SgfI-MluI



[View online »](#)

**Cloning Scheme:**


**ACCN:** NM\_172201

**ORF Size:** 369 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\\_172201.2](#)

**RefSeq Size:** 809 bp

**RefSeq ORF:** 372 bp

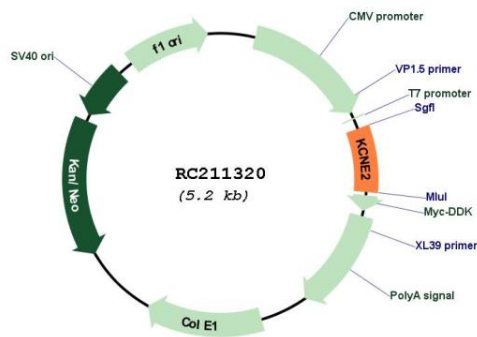
**Locus ID:** 9992

**UniProt ID:** [Q9Y6J6](#)

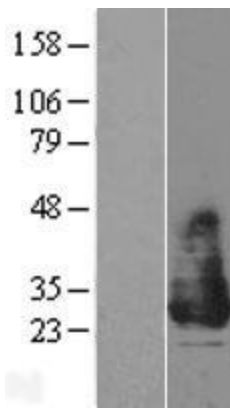
**Cytogenetics:** 21q22.11  
**Protein Families:** Druggable Genome, Transmembrane  
**MW:** 14.5 kDa

**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 small integral membrane subunit that assembles with the KCNH2 gene product, a pore-forming protein, to alter its function. This gene is expressed in heart and muscle and the gene mutations are associated with cardiac arrhythmia. [provided by RefSeq, Jul 2008]

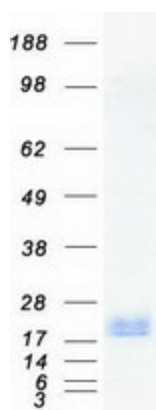
**Product images:**



Circular map for RC211320



Western blot validation of overexpression lysate (Cat# [LY403536]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211320 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KCNE2 protein (Cat# [TP311320]). The protein was produced from HEK293T cells transfected with KCNE2 cDNA clone (Cat# RC211320) using MegaTran 2.0 (Cat# [TT210002]).