

Product datasheet for **RC210303**

KCNE3 (NM_005472) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: KCNE3 (NM_005472) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: KCNE3
Synonyms: BRGDA6; HOKPP; HYPP; MiRP2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC210303 ORF sequence
Red=Cloning site **Blue**=ORF **Green**=Tags(s)

TTTGTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGAGACTACCAATGGAACGGAGACCTGGTATGAGAGCCTGCATGCCGTGCTGAAGGCTCTAAATGCCA
CTCTTCACAGCAATTTGCTCTGCCGGCCAGGGCCAGGGCTGGGGCCAGACAACCAGACTGAAGAGAGGCG
GGCCAGCCTACCTGGCCGTGATGACAACCTACATGTACATTCTTTGTCATGTTTCTATTTGCTGTA
ACTGTGGGCAGCCTCATCTGGGATACACCGCTCCCGCAAAGTGGACAAGCGTAGTGACCCCTATCATG
TGATATCAAGAACCGTGTGTCTATGATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC210303 protein sequence
Red=Cloning site **Green**=Tags(s)

METTNGTETWYESLHAVLKALNATLHSNLLCRPGPLGPDNQTEERRASLPGRDDNSYMYILFVMFLFAV
TVGSLILGYTRSRKVDKRSDPYHYVIKNRVSMI

TRTRPLE**QKLISEEDLA**NDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6005_c09.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_005472

ORF Size: 309 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_005472.5](#)

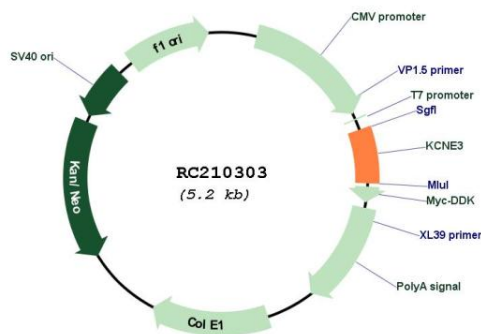
RefSeq Size: 3070 bp

RefSeq ORF: 312 bp

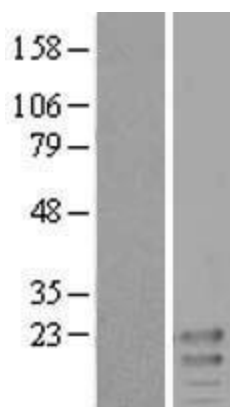
Locus ID: 10008
UniProt ID: [Q9Y6H6](#)
Cytogenetics: 11q13.4
Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane
MW: 11.7 kDa

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 kidney. A missense mutation in this gene is associated with hypokalemic periodic paralysis. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC210303



Western blot validation of overexpression lysate (Cat# [LY401689]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210303 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).