

## Product datasheet for **SC123112**

### KCNE4 (NM\_080671) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** KCNE4 (NM\_080671) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** KCNE4  
**Synonyms:** MIRP3  
**Mammalian Cell Selection:** None  
**Vector:** [pCMV6-XL5](#)  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_080671 edited  
AACAAAAATATTAACGCTTACAATTTCCATTCGCCATTCAGGCTGCGCAACTGTTGGGAAGGGCGATCGGT  
GCGGGCCTCTTCGCTATTACGCCAGCTGGCGAAAGGGGGATGTGCTGCAAGGCGATTAAGTTGGGTAAACG  
CCAGGGTTTTCCAGTCACGACGTTGTAACGACGCGCCAGTGCCAAGCTGATCTATACATTGAATCAAT  
ATTGGCAATTAGCCATATTAGTCATTGGTTATATAGCATAAAATCAATATTGGCTATTGGCCATTGCATAC  
GTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGACATTGA  
TTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCGCGG  
TTACATAACTTACGGTAAATGGCCCGCTGGCTGACCGCCCAACGACCCCGCCATTGACGTCAATAAT  
GACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTACGGTAA  
ACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTCCGCCCTATTGACGTCAATGACGGTA  
AATGGCCCGCTGGCATTATGCCAGTACATGACCTTACGGGACTTTCTACTTGGCAGTACATCTACGT  
ATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAGTACACCAATGGGCGTGGATAGCGGTTTGAC  
TCACGGGGATTTCCAAGTCTCCACCCATTGACGTCAATGGGAGTTTGTGGTGGCACCAAAATCAACGGG  
ACTTTCCAAAATGTCGTAATAACCCCGCCCGTTGACGCAAAATGGGCGGTAGGCGTGTACGGTGGGAGGT  
CTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGCGA  
ATTCAAACCTTGGGACAACTGTCAGCCTTGCCCTGCTGTGGAGGCAGCCTCAATGCTGAAAATGGAGC  
CTCTGAACAGCACGCACCCCGCCACCGCCCTCCAGCAGCCCTGGAGTCCCGTGGCGCGGTGGCGG  
CAGCGGCAATGGCAACGAGTACTTCTACATTCTGGTTGTCATGTCCTTCTACGGCATTCTTCTGATCGGA  
ATCATGCTGGGCTACATGAAATCCAAGAGCGGGGAGAAGAAGTCCAGCCTCCTGCTGTGTACAAGAGC  
AGGAGCGGCTCTGGGGGAGGCCATGAAGCCGCTGCCCGTGGTGTGCGGGCCTGAGGTGCGTCCAGGTGCC  
CCTGATGCTGAACATGCTGCAGGAGAGCGTGGCGCCCGCTGTCTGCAACCTCTGTTCCATGGAAGGG  
GACAGCGTGAGCTCCGAGTCTCTCCCGGACGTGCACCTCACCATTCAGGAGGAGGGGCGAGCAGAGG  
AGCTGGAGGAGACCTCGGAGACGCCCTCAACGAGAGCAGCGAAGGGTCTCGGAGAATCCATCAGAA  
TTCCTAGCACCCCGGGACCCCTGCGGGTGGCTCCATCAGCCAGCAACCTTAGAGAGAGGAAAGACAGTT  
TTCAAGTGTCTGGTTTCACTTTACAGTGCAGTGCACCTTTGAAGAGACCTTGGTAAACCCCTGATTC  
GGGGTGGGGTGGGGGACTAGGCTCAGCCGAACAGCACCTCAAGGAGTCCGGGAGGTGCCTGTGGTTT  
GCACCCACCACTGAAAAAGCCGCGGAGATGCGCAGCGCTACACTGACTTTGGGGCTGGGTGTTGGGGT



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TCTGATCAGAATTTGGCGGGATGATATGCTTGCCATTTTCTCACTGGATGCCCTGGGTAGCTCCTGCAGG  
 GTCTGCCTGTTCCAGGGCTGCCGAATGCTTAGGACACGCTGAGAGACTAGTTGTGATTTGCTATTTTGC  
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 GGAAAGTCCCAAGGCTCCCAAGCAGGCAAGATGCAAAGCATGCATCTCAATTAGTCAGCAACCAATAG  
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 CCATAGGCTCCGCCCTGACGAGCATCAAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACA  
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 CCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTGAAGTGGTGGCTAA  
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 CGAAAACTCACGTTAAGGGATTTGGTCAATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAAT  
 TAAAAATGAAGTTTTAAATCAATCTAAAGTATATAGAGTAAACTTGGTCTGACAGTTACCAATGCTTAA  
 TCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTCTGTTCCATCCATAGTTGCCTGACTCCCGCTCGTGA  
 GATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGTGCAATGATACCGCGAGACCCACGCTCA  
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 TATCCGCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTCCGCCAGTTAATAGTTT  
 GCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCTGTTGGTATGGCTTCATTCAGC  
 TCCGTTTTCCCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAGCGGTTAGTCTCTTCG  
 GTCCTCCGATCGTTGTCAGAAGTAAGTTGGCCGAGTGTATCACTCATGGTTATGGCAGCACTGCATAA  
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 GAACCTTAAAAGTGTCTATCATTGGAACGTTCTTCCGGGCGAAAACTCTCAAGGATCTTACCCTGTT  
 GAGATCCAGTTCGATGTAACCCACTCGTGCACCAACTGATCTTACAGCATCTTTACTTTACCAGCGTT  
 TCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAAGGGCGACACGGAATGTTGAA  
 TACTCATACTCTCTTTTTCAATATTATGAAGCATTTATCAGGTTATTGTCTCATGAGCGGATACAT  
 ATTTGAATGTATTTAGAAAAATAAACAATAAGGGTCCGCGCACATTTCCCGAAAAAGTGCCACCTGAC  
 GCGCCCTGTAGCGGCGCATTAAGCGCGGCGGGTGTGGTGGTTACGCGCAGCGTGACCGCTACACTTGCCA  
 GCGCCCTAGCGCCGCTCCTTTCCGCTTTCTCCCTTCTTCTCGCCACGTTCCGCGGCTTTCCCGTCA  
 AGCTCTAAATCGGGGGCTCCCTTTAGGGTTCCGATTTAGTGCTTTACGGCACCTCGACCCAAAAAACTT  
 GATTAGGGTGTAGGTTACAGTAGTGGCCATCGCCCTGATAGACGGTTTTTCCGCTTTGACGTTGGAGT

CCACGTTCTTTAATAGTGGACTCTTGTTCCAAACTGGAACAACACTCAACCCTATCTCGGTCTATTCTTT  
TGATTTATAAGGGATTTTGCCGATTTTCGGCCTATTGGTTAAAAAATGAGCTGATTTAACAAAAATTTAAC  
GCGAATTTTAACAAAATATT

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_080671 unedited  
NNAAGTCAGAAATTTGTAACGACTCATATAGCGGCCCGGNAATCAAACTTGGNGAC  
AAACTGTCAGCCTTGCCCTGCTGTGGAGCAGCCTCATGCTGAAAATGGAGCCTTGAA  
CAGCACGCAACCCCGCACCGCCGCTCCAGCAGCCCTGGAGTCCCGTGCAGCCGTTGG  
CGGCAGCGGAATGGCAACGAGTACTTCTACATTCTGGTTGTCATGTCCTTCTACGGCAT  
TTTCTTGATCGGAATCATGCTGGGCTACATGAAATCCAAGAGGCGGGAGAAGAAGTCCAG  
CCTCTGCTGCTGTACAAAGACGAGGAGCGGCTCTGGGGGGAGGCCATGAAGCCGCTGCC  
CGTGGTGTCCGGCCTGAGGTGCGTGCAGGTGCCCTGATGCTGAACATGCTGCAGGAGAG  
CGTGGCGCCCGCCTGTCTGCACCCTGTGCCATGGAAGGGGACAGCGTGAGCTCCGA  
GTCTCTCCCGGACGTGCACCTCACCATTCAGGAGGAGGGGGCAGACGAGGAGTGGG  
GGAGACCTCGGAGACGCCCTCAACGAGAGCAGCGAAGGGTCTCGGAGAACATCCATCA  
GAATTCCTAGCACCCCGGACCCCTGCGGGTGGCTCCATCAGCCAGCAACCTTAGAGAG  
AGGAAAGACAGTTTTCAAGTGTCTGGTTTCACTTTCACAGTGCAGTGCCTTTGAAGA  
GACCTTGGTAAACCCCTGATTCGGGTGGGGTGGGGGACTAGGCTCAGCCGGAACAG  
CACCTCAAGGAGTCCGGGGAGGTGCCTGTGGTTTTGCACCCACCACTGAAAAAGCCGCG  
GAGATGCGCAGCGGTACTGACTTTGGGGCCTGGGTGTTGGGGTCTGATCAAATT  
TGGCGGAT

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_080671

**Insert Size:**

1204 bp

**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).

**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:**

1204 bp

**RefSeq ORF:**

513 bp

**Locus ID:**

23704

**UniProt ID:**

[Q8WWG9](#)

**Cytogenetics:**

2q36.1

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

**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]