

## Product datasheet for **SC123935**

### **KCNV2 (NM\_133497) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	KCNV2 (NM_133497) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNV2
Synonyms:	Kv8.2; KV11.1; RCD3B
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_133497, the custom clone sequence may differ by one or more nucleotides

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ATGCTCAAACAGAGTGAGAGGAGACGGTCTCGGAGCTACAGGCCCTGGAACACGACGGAGAATGAGGGCA
GCCAACACCCGAGGAGCATTGCTCCCTGGGTGCCCGTTCGGCTCCCAGGCCAGCATCCACGGCTGGAC
AGAGGGCAACTATAACTACTACATCGAGGAAGACGAAGACGGCGAGGAGGAGGACCAGTGAAGGACGAC
CTGGCAGAAGAGGACCAGCAGGCAGGGGAGGTACCACCGCCAAGCCCGAGGGCCCCAGCGACCCTCCGG
CCCTGCTGTCCACGCTGAATGTGAACGTGGGTGGCCACAGCTACCAGCTGGACTACTGCGAGCTGGCCGG
CTTCCCCAAGACGCGCTAGGTCGCTGGCCACCTCCACCAGCCGAGCCGCCAGCTAAGCCTGTGCGAC
GACTACGAGGAGCAGACAGACGAATACTTCTTCGACCCGACCCCGCCGCTTCCAGCTGGTCTACAATT
TCTACCTGTCCGGGGTGTGCTGGTGTGACGGGCTGTGTCCGCGCCGCTTCTGGAGGAGCTGGGCTA
CTGGGGCGTGGGCTCAAGTACACGCCACGCTGCTGCCGATCTGCTTCGAGGAGCGGCGCAGCAGCTG
AGCGAACGGCTCAAGATCCAGCACGAGCTGCGCGCGCAGGCGCAGGTGAGGAGGCGGAGGAACCTTCC
GGACATGCGCTTCTACGGCCCCAGCGGCGCCGCTCTGGAACCTCATGGAGAAGCCATTCTCCTCGGT
GGCCGCCAAGGCCATCGGGGTGGCTCCAGCACCTTCGTGCTCGTCCGTGGTGGCGCTGGCGCTCAAC
ACCGTGGAGGAGATGCAGCAGCACTCGGGGCAGGGCGAGGGCGGCCAGACCTGCGGCCATCCTGGAGC
ACGTGGAGATGCTGTGCATGGGCTTCTTACGCTCGAGTACCTGCTGCGCCTAGCCTCCACGCCCGACCT
GAGGGCGTTCGCGCGCAGCGCCCTCAACCTGGTGGACCTGGTGGCCATCCTGCCGCTTACCTTCAGCTG
CTGCTCGAGTGTTCACGGGCGAGGGCCACCAACGCGGCCAGACGGTGGGCGAGCTGGGTAAAGTGGGTG
AGGTGTTGCGCGTCATGCGCCTCATGCGCATCTCCGCATCCTCAAGCTGGCGGCCACTCCACCGGACT
GGCTGCCTTCGGCTTACGCTGCGCCAGTGCTACCAGCAGGTGGGCTGCCTGCTGCTTTCATCGCCATG
GGCATCTTCACTTCTCTGCGGCTGTCTACTCTGTGGAGCAGATGTGCCAGCAACCACTTCACTACCA
TCCCCACTCCTGGTGGTGGGCCGCGGTGAGCATCTCCACCGTGGGCTACGGAGACATGTACCCAGAGAC
CCACCTGGGCAGGTTTTTGCCTTCTCTGCAATTGCTTTTGGGATCATTCTCAACGGGATGCCCATTTCC
ATCCTCTACAACAAGTTTTCTGATTACTACAGCAAGCTGAAGGCTTATGAGTATACCACCATACGCAGGG
AGAGGGGAGAGGTGAACCTCATGCAGAGAGCCAGAAAAGAGATAGCTGAGTGTGTTGCTTGAAGCAACCC
ACAGCTCACCCCAAGACAAGAGAATTAG
    
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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_133497 unedited

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TTCAAATTTTGTAAACGACTTCACTATAGGGCGCCGCAATTCGCACCAGGAAGACCA
GGCATCCGTATTCTATAGCTAATTCAGTTGATTTTCATCTCAGCACACATACACTGAGCGC
TTCCTAAGAGCGAGGTTGACCGACATTTTTATTAGCAATAATCTCTGCCTTCTTCTGATT
ACCTAGAGATTTAAGACCACATAATCATCCTCTACCTCACAGGGTCAAGGGAGTGGGGGA
GGAAATGGGCTAAGAGGTTCTAAATCCCTCCTAACACTTGCTTCTTCAAATCAGCAAGA
TTAGAGCAGTCAACAGCTGACTGCGTTCAGACCCTGCAGGCTGGGCTGGCCTGCCAGGA
CCTGAGAAGGGGAGCTCCGGTGGCAATGTCTGAGCCCCCTAGCTGTGCTGGTCCGGGCTG
GCCTCTTAAGACAGTGCAGGCCACGTGATCCATCCTCCTAGAGGCAGGGAGCAGGTGAG
GGACCCCTACGACAGCCAGGAGGAAAAAGCTAGGCGTCCACTTTCCGAGCCATGCTCAA
ACAGAGTGAGAGGAGACGGTCTGGAGCTACAGGCCCTGGAACACGACGGAGAATGAGGG
CAGCCAACACCGCAGGAGCATTGCTCCCTGGGTGCCCGTTCGGCTCCCAGGCCAGCAT
CCACGGCTGGACAGAGGGGCACTATNACTACTACATCGAGGAAGACGAAGACGGGGAGGA
GGAGGACCAGTGAAGGACGACCTGNCAGAAGAGGACAGCAGGCAGGGGAGGTACCACC
GCCAAGCCCGAGGGCCCCAGCGACCCTCCGGCCCTGCTGTACGCTGGATGTGAAACGTG
GTTGCCACAGCTACCAACTGGACTACTGCGAGCTGGCCGGCTTTCCAGAAACGCCTAGG
TCGCCTGGCCACCTCCACCAGCGCAGCCGCCAGTTAA
    
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<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_133497 unedited GGTGCAACTTCCGGAGCCGGAGAGGCACTGGGGAGGGTACAGGGATGCCACCCGGGAT CTGTTCAGGAAACAGCTATGACCGCGGCCGAATCTAGAGTCGAGTTTTTTTTTTGGTTT TTTTTTTCAAGTCCAAAAATATTTATTGAGCTAGATGCCACGAGAAGCTACAAGAAAA TCTAAGCTGTTGCTCCCCTCAGGTTTTCAATATCAACGTCATTGAGAAGGTCAGATGTTT CACACAACACAGAGCAACTATGAGACATTCTGAGTTTGGGCCAAAATGAGTATTTCTAGA GGCAGTACTTTGTGAACGAAATGGCCTTTGTGTATGTCTGCTTCCATTTCCTTTTGCTG CCAATCATAATGATTAATAAAAAAGAGCAATGAAGCCTTGAAGTTCATGGAATCTACCAGCC ACATGTCTATAAAATACTAATTCTCTTGTCTTGGGGTGAAGTGTGGGTTGCTTCCAAGC AAACACTCAGCTATCTTCTTTCTGGCTCTCTGCATGAAGTTCACCTCTCCCCTCTCCCTG CGTATGGTGGTATACTCATAAGCCTTCAGCTTGTGTAGTAATCAGAAAATTGTTGTAG AGGATGGAATGGGCATCCCGTTGAGAATGATCCCAAAGCAATGCAGAGGAAGGCAAAA AACCTGCCAGGTGGGTCTCTGGGTACATGTCTCCGTAGCCACGGTGGAGATGCTCCNT TAGGAANAGAAGATGGAGCAAGTCTCTGGGACAAATGGTGCCTACTAGAGA
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_133497
<b>Insert Size:</b>	2700 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_133497.2</a></u> , <u><a href="#">NP_598004.1</a></u>
<b>RefSeq Size:</b>	1882 bp
<b>RefSeq ORF:</b>	1638 bp
<b>Locus ID:</b>	169522
<b>UniProt ID:</b>	<u><a href="#">Q8TDN2</a></u>
<b>Cytogenetics:</b>	9p24.2
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Potassium, 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 voltage-gated channel subfamily V. This member is identified as a 'silent subunit', and it does not form homomultimers, but forms heteromultimers with several other subfamily members. Through obligatory heteromerization, it exerts a function-altering effect on other potassium channel subunits. This protein is strongly expressed in pancreas and has a weaker expression in several other tissues. [provided by RefSeq, Jul 2008]