

Product datasheet for **SC337872**

KCNT2 (NM_001287819) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNT2 (NM_001287819) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNT2
Synonyms:	EIEE57; KCa4.2; SLICK; SLO2.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001287819, the custom clone sequence may differ by one or more nucleotides

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ATGGTTGATTTGGAGAGCGAAGTGCCCCCTCTGCCTCCCAGGTACAGGTTTCGAGATTTGCTGCTAGGGG
ACCAAGGATGGCAAACGACGACAGGGTACAAGTTGAATTCTATATGAATGAAAATACATTTAAAGAAAAG
ACTAAAATTTATTTTCATAAAAAACAGAGATCAAGTCTAAGGATACGCCTGTTCAATTTTTCTCTCAAA
TTACTAAGCTGCTTATTATACATAATCCGAGTACTACTAGAAAACCCCTTCAACAAGGAAATGAATGGTCTC
ATATCTTTTGGTGAACAGAAGTCTACCTTTGTGGGGCTTACAGGTTTCAGTGGCATTGATAAGTCTGTT
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ATCTTGAAATAATTAATGCAGTCCCTCATTATCTCAATATTCTGGCCTTCCTTAAGGAATCTATTTG
TCCAGTCTTTTGAAGTGTGGCTTGCCAAACATGCCTTGAAAAATATGATTAATGATCTACACAGAGC
CATTACAGCTACACAGTCTGCAATGTTTAAATCAAGTTTTGATTTTAAATATCTACATTACTATGCCTTATC
TTCACCTGCATTTGTGGGATCCAACATCTGGAACGAATAGGAAAGAAGCTGAATCTCTTTGACTCCCTTT
ATTTCTGCATTGTGACGTTTTCTACTGTGGGCTTCGGGGATGTCACCTGAAACATGGTCTCCAAGCT
TTTTGTAGTTGCTATGATTTGTGTTGCTCTGTGGTCTACCCATACAGTTTGAACAGCTGGCTTATTTG
TGGATGGAGAGACAAAAGTCAGGAGGAAACTATAGTCGACATAGAGCTCAAAGTAAAAGCATGTCGTCC
TGTGTGCAGCTCACTGAAGATTGATTTACTTATGGATTTTTTAAATGAATCTATGCTCATCCTAGGCT
CCAGGATTATTATGTGGTGATTTTGTCTACTGAAATGGATGTACAGGTTTCAAGGGTACTGCAGATT
CCAATGTGGTCCCAACGAGTTATCTACCTTCAAGGTTTCAAGGCTTAAAGATCAAGACCTATTGAGAGCAA
AGATGGATGACGCTGAGGCTGTTTTATTCTCAGTAGCCGTTGTGAAGTGGATAGGACATCATCTGATCA
CCAAACAATTTTGAAGCATGGGCTGTGAAAGATTTTGTCCAAATTTGCTCCTTTGTATGTCAGATATTA
AAGCCTGAAAATAAATTTACATCAAATTTGCTGATCATGTTGTTGTGAAGAAGAGTTTAAATACGCCA
TGTTAGCTTTAACTGTATATGCCAGCAACATCTACACTTATTACACTACTGGTTCATACCTCTAGAGG
GCAAGAAGGCCAGCAATCGCCAGAACAATGGCAGAAGATGACGGTAGATGCTCCGGGAATGAAGTCTAC
CACATTGTTTTGGAAGAAAGTACATTTTTTGTGAATATGAAGGAAAGAGTTTACATATGCCTCTTTCC
ATGCACACAAAAGTTTGGCGTCTGCTTGATTGGTGTAGGAGGGAGGATAATAAAAACATTTTGTCTGAA
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TCCAGGTCCTCGATACATTATGAATTCTACAGACATATGCTTTTATATTAATATTACAAAGAAGAGAAT
TCAGCATTTAAAAACCAAGACCAGCAGAGAAAAAGCAATGTGTCCAGGTCGTTTTATCATGGACCTTCCA
GATTACCTGTACATAGCATAATTGCCAGCATGGTACTGTGGCTATAGACTTGCAAGATACAAGCTGTAG
ATCAGCAAGTGGCCCTACCCTGTCTCTTCTACAGAGGGAAGCAAAGAAATAAGAAGACCTAGCATTGCT
CCTGTTTTAGAGGTTGCAGATACATCATCGATTCAAACATGTGATCTTCTAAGTGACCAATCAGAAGATG
AAACTACACCAGATGAAGAAATGTCTTCAAACCTAGAGTATGCTAAAGGTTACCCACCTTATTCTCCATA
TATAGGAAGTTCACCCACTTTTTGTCTATCCTTCATGAAAAAGTACCATTTTGTGCTTAAGATTAGAC
AAGAGTTGCCAACATAACTACTATGAGGATGCAAAAGCCTATGGATTCAAAAATAAACTAATTATAGTTG
CAGCTGAAACAGCTGAAATGGATTATATAACTTTATTGTTCTCTCAGGGCATATTATAGACCAAAGAA
AGAACTTAATCCCATAGTACTGCTATTGGATAACCCCTAGATGACTTACTCAGGTGTGGAGTGACTTTT
GCTGCTAATATGGTGGTTGTGGATAAAGAGAGCACCATGAGTGCCGAGGAAGACTACATGGCAGATGCCA
AAACCATTGTGAACGTGCAGACTCTTCAGGTTGTTTTCCAGTCTCAGTATTATCACAGAGCTAACTCA
CCCCGCCAACATGAGATTCATGCAATTCAGAGCCAAAGACTGTTACTCTTGTCTTTCAAACCTGGAA
AAGAAAGAACGGGAGAGAGGCTCTAACTGGCCTTTATGTTTCGACTGCCTTTTGTGCTGGGAGGGTGT
TTAGCATCAGTATGTTGGACTCTGCTGTATCAGTCATTTGTGAAGGATTATATGATTTCTATCAGAG
ACTTCTGTTGGGACTGGACTACACCAGATCTGGGTTTCTTTGTTCTATGAAAATCACTGCAGATGAC
TTATGGATCAGAACTTATGCCAGACTTTATCAGAAGTTGTGTTCTTCTACTGGAGATGTTCCCATGGAA
TCTACAGGACTGAGTCTCAGAACTTACTACATCTGAGTCTCAAATATCTATCAGTGTAGAAGAGTGGGA
AGACACCAAAGACTCCAAAGAACAAGGGCACCACCGCAGCAACCACCGCAACTCAACATCCAGTGATCAG
TCGGACCATCCCTTGTGTCGGGAGAAAAAGCATGCAGTGGGCCCGAAGACTGAGCAGAAAAGGCCAAAAC
ACTCTGGTAAAACAGCTGAAAAATAACCCAGCAGCGACTGAACCTCTACAGGAGTCTCAGAAAGACAAGA
GCTTGTGAACTTGTGAAAAATAGAATGAAACACTTGGGCTTTTCTACAGTGGGATATGATGAAATGAAT
GATCATCAAAGTACCCTCTCTACATCCTGATTAACCCATCTCCAGATACCAGAATAGAGCTGAATGATG
TTGTATACTTAATTCGACCAGATCCACTGGCCTACCTTCCAACAGTGAGCCAGTGAAGAAACAGCAT
CTGCAATGTCCTGGTCAAGATTCTCGGGAGGAACTCAACTTGA
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Restriction Sites: SgfI-MluI

ACCN: NM_001287819

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_001287819.1](#), [NP_001274748.1](#)

RefSeq Size: 5903 bp

RefSeq ORF: 3336 bp

Locus ID: 343450

UniProt ID:	<u>Q6UVM3</u>
Cytogenetics:	1q31.3
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
Gene Summary:	<p>Outward rectifying potassium channel. Produces rapidly activating outward rectifier K(+) currents. Activated by high intracellular sodium and chloride levels (PubMed:14684870, PubMed:16687497, PubMed:29069600). Channel activity is inhibited by ATP and by inhalation anesthetics, such as isoflurane (PubMed:16687497) (By similarity). Inhibited upon stimulation of G-protein coupled receptors, such as CHRM1 and GRM1 (PubMed:16687497).</p> <p>[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) lacks an in-frame exon in the central coding region, compared to variant 1. The encoded isoform (2) is shorter, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>