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Product datasheet for SC333183

KCNT1 (NM_001272003) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNT1 (NM_001272003) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNT1
Synonyms:	bA100C15.2; DEE14; EIEE14; ENFL5; KCa4.1; SLACK; Slo2.2
Vector:	pCMV6-Entry (PS100001)

Fully Sequenced ORF:

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>SC333183 representing NM_001272003.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGCCACTCCCTGACGGGGCGCGGACCCCGGGGGGCGTCTGCCGGGAGGCGCGCGGCGGGGGCTACACC
AACCGGACCTTCGAGTTTGACGACGGCCAATGCGCCCCCAGGGTCCAGGTGGAGTTCTACGTCAACGAG
AACACCTTCAAGGAGCGGCTCAAGCTGTTCTTCATCAAAAACCAAAGATCGAGCCTGAGGATCCGGCTG
TTCAACTTCTCCCTGAAGCTGCTCACCTGCCTGCTCTACATTGTGCGCGTCCTGCTCGATGACCCGGCC
CTGGGCATCGGATGCTGGGGCTGCCCAAAGCAGAACTACTCCTTCAATGACTCGTCCTCCGAGATCAAC
TGGGCTCCTATTCTGTGGGTGGAGAGAAAGATGACACTGTGGGCGATCCAGGTCATCGTGGCCATAATA
AGCTTCCTGGAGACGATGCTTCTCATCTACCTCAGCTACAAAGGCAACATCTGGGAGCAGATCTTCCGC
GTGTCCTTCGTCCTGGAGATGATCAACACTCTGCCCTTCATCATCACGATCTTCTGGCCGCCGCTGCGG
AACCTGTTCATCCCCGTCTTTCTGAACTGCTGGCTGGCCAAGCACGCGCTGGAAAACATGATTAATGAC
TTCCACCGTGCCATCCTGCGGACACAGTCAGCCATGTTCAACCAGGTCCTCATCCTCTTCTGCACCCTG
CTGTGCCTCGTTTTCACGGGGGGTTGCAGGACCTGCGGCATCCAGCACCTGGAGCGGGCGGGCGAGAAC
CTGTCCCTCCTGACCTCCTTCTACTTCTGCATCGTCACCTTCTCCACCGTGGGCTACGGTGACGTCACG
CCCAAGATCTGGCCATCGCAGCTGCTGGTGGTCATCATGATCTGCGTGGCCCTCGTGGTGCTCCCACTG
CAGTTCGAGGAGCTCGTCTACCTCTGGATGGAGCGGCAGAAGTCAGGGGGCAACTACAGCCGCCACCGT
GCGCAGACGGAGAAGCACGTGGTCCTGTGTGTCAGCTCCCTCAAGATCGACCTTCTCATGGACTTCCTG
AACGAGTTCTACGCCCACCCCCGGCTCCAGGACTATTACGTGGTCATCCTGTGCCCCACGGAGATGGAT
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CTCAAAGACCAGGACCTCATGCGAGCCAAGATGGACAATGGGGAGGCCTGCTTCATCCTCAGCAGCAGG
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CTGAAGCGGGAGGACAACAAGAGCATCCTGCTGAACCCGGGGCCCCGGCACATCCTGGCCGCCTCTGAC
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GCCTCCATGGGGACAGTGGCCATGGACCTGCAGGGCACAGAGCACCGGCCTACGCAGAGCGGCGGTGGG
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GGCGGGGGCAGCAAGCTGGCACTGCCCACGGAGAACGGCTCGGGCAGCCGGCGGCCCAGCATCGCGCCC
GTCCTGGAACTGGCCGACAGCTCAGCCCTGCTGCCCTGCGACCTGCTGAGCGACCAGTCGGAGGATGAG
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GCCCAGTCCCAGATCTCGGTGAACGTGGAGGACTGTGAGGACACACGGGAAGTGAAGGGGCCCTGGGGC
TCCCGCGCTGGCACCGGAGGCAGCTCCCAGGGCCGCCACACGGGCGGCGGTGACCCCGCAGAGCACCCA
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TCCGAGCTGGTGAAGAACCGCATGAAGCACCTGGGGCTGCCCACCACCGGCTACGAGGACGTAGCAAAT
TTAACAGCCAGTGATGTCATGAATCGGGTAAACCTGGGATATTTGCAAGACGAGATGAACGACCACCAG
AACACCCTCTCCTACGTCCTCATCAACCCTCCGCCCGACACGAGGCTGGAGCCCAGTGACATTGTCTAT
CTCATCCGCTCCGACCCCCTGGCTCACGTGGCCAGCAGCTCCCAGAGCCGGAAGAGCAGCTGCAGCCAC
AAGCTGTCGTCCTGCAACCCCGAGACTCGCGACGAGACACAGCTCTGA

Restriction Sites: SgfI-MluI

ACCN: NM_001272003

Insert Size: 3636 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_001272003.1

RefSeq Size: 4696 bp

RefSeq ORF: 3636 bp

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Locus ID:	57582
UniProt ID:	Q5JUK3
Cytogenetics:	9q34.3
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
MW:	137 kDa
Gene Summary:	Potassium 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 sodium-activated potassium channel subunit which is thought to function in ion conductance and developmental signaling pathways. Mutations in this gene cause the early-onset epileptic disorders, malignant migrating partial seizures of infancy and autosomal dominant nocturnal frontal lobe epilepsy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2012] Transcript Variant: This variant (2) lacks an alternate exon in the 5' coding region, uses an alternate splice site in the 5' region and contains an additional exon in the 3' coding region, compared to variant 1. The encoded isoform (2) is shorter than isoform 1. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.

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