

Product datasheet for RC239978

KCNT2 (NM_001287819) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNT2 (NM_001287819) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNT2
Synonyms:	EIEE57; KCa4.2; SLICK; SLO2.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC239978 representing NM_001287819 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTTGATTTGGAGAGCGAAGTGCCCCCTCGCCTCCAGGTACAGGTTTCGAGATTTGCTGCTAGGGG
ACCAAGGATGGCAAACGACGACAGGGTACAAGTTGAATTCTATGAATGAAAATACATTTAAAGAAA
ACTAAAATATTTTTCAAAAAACCAGAGATCAAGTCTAAGGATACGCCTGTTCAATTTTTCTCTCAA
TTACTAAGCTGCTTATTATACATAATCCGAGTACTACTAGAAAACCTTCACAAGGAAATGAATGGTCTC
ATATCTTTTGGGTGAACAGAAGTCTACCTTTGTGGGGCTTACAGGTTTCAGTGGCATTGATAAGTCTGT
TGAACAATATTACTTGGTTATCTTAGTTATAAGGAAACATCTGGGAACAGATTTTACGAATACCCCTC
ATCTTGAAATAATTAATGCAGTTCCTTCATTATCTCAATATTCGGCCTTCCTTAAGGAATCTATTTG
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CATTACAGCTACACAGTCTGCAATGTTAATCAAGTTTGATTTAATATCTACATTACTATGCCTTATC
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CACATTGTTTTGGAAGAAAGTACATTTTTTGTGAATATGAAGGAAAGAGTTTTACATATGCCTCTTTCC
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC239978 representing NM_001287819
 Red=Cloning site Green=Tags(s)

MVDLESEVPLPPRYRFRDLLLGDQGWQNDRRVQVEFYMNENTFKERLKLFFIKNQRSSLRIRLFNFSLK
 LLSCLLYIIRVLLNPSQGNESHIFWVNRSLPLWGLQVSVALISL FETILLGYLSYKGNWEQILRIPF
 ILEIINAVPFIISIFWPSLRNLFVPVFLNCWLAKHALENMINDLHRAIQRTQSAMFNQVLI LITLCLLI
 FTCICGIQHLEIRIGKLNLFDSL YFCIVTFSTVGFQDVTPEWSSKLFVVAMICVALVVLPIQFEQLAYL
 WMERQKSGNYSRHAQTEKHVVL CVSSSLKIDLLMDFLNEFYAHPRLQDYVVVILCPTMDVQVRRVLQI
 PMWSQRVIYLGQSALKDQDLLRAKMDDAEACFILSSRCEVDRTSSDHQTLRAWAVKDFAPNCPLYVQIL
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 HIVLEESTFFAEYEGKSFTYASFHAKKFGVCLIGVRREDKNILLNPGPRYIMNSTDICYFINITKEEN
 SAFKNQDQQRKSNVRSFYHGPSRLPVHSIIASMGTVADLQDTSRCSASGPTLSLPTGESKEIRRPSIA
 PVLEVADTSSIQTCDLLSDQSEDETPDEEMSSNLEYAKGYPPSPYIGSSPTFCHLLHEKVPFCCLRD
 KSCQHNYEDAKAYGFKNLIIVAAETAGNLYNFIVPLRAYRPPKELNPIVLLDNLDDLLRCGVTF
 AANMVVDKESTMSAEEDYMAKTIIVNVQTLFRLFSSLSIITELTHPANMRFMQFRAKDCYSLALSKLE
 KKERERGSNLAFFRPLFAAGRVSISMLDITLLYQSFVKDYMISITRLLGLDTPGSGFLCSMKITADD
 LWIRTYARLYQKLCSSDGVPIGIYRTESQKLTTSQSISISVEEWEDTKDSKEQGHRSNHRNSTSSDQ
 SDHPLLRKSMQWARRLSRKGPKHSGKTAEKITQQLNLYRRSERQELAEVKNRMKHLGLSTVGYDEMND
 HQSTLSYILINPSDTRIELNDVVYLIRPDPLAYLPNSEPSRRNSICNVTGQDSREETQL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001287819

ORF Size: 3333 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.

RefSeq: [NM_001287819.3](#)

RefSeq Size: 5903 bp

RefSeq ORF: 3336 bp

Locus ID: 343450

UniProt ID: [Q6UVM3](#)

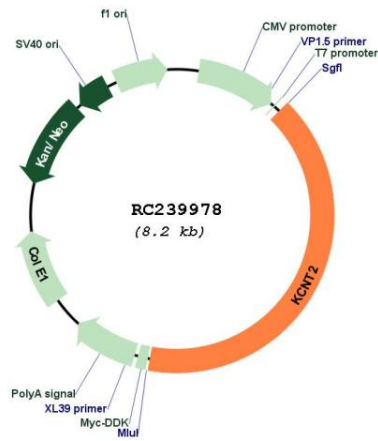
Cytogenetics: 1q31.3

Protein Families: Druggable Genome, Ion Channels: Potassium, Transmembrane

MW: 128.1 kDa

Gene Summary: 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). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC239978