

Product datasheet for RC239933

KCNT2 (NM_001287820) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNT2 (NM_001287820) 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:	>RC239933 representing NM_001287820 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTTGATTTGGAGAGCGAAGTGCCCCCTCGCCTCCCAGGTACAGTTTCGAGATTTGCTGCTAGGGG
ACCAAGGATGGCAAACGACGACAGGGTACAAGTTGAATTCATATGAATGAAAACATTTAAAGAAAG
ACTAAAATTATTTTTCATAAAAAACCAGAGATCAAGTCTAAGGATACGCCTGTTCAATTTTCTCTCAA
TTACTAAGCTGCTTATTATACATAATCCGAGTACTACTAGAAAACCCCTCACAAGGAAATGAATGGTCTC
ATATCTTTTGGGTGAACAGAAGTCTACCTTTGTGGGGCTTACAGTTTCAGTGGCATTGATAAGTCTGTT
TGAACAATATTACTTGGTTATCTTAGTTATAAGGGAAACATCTGGGAACAGATTTTACGAATACCCCTTC
ATCTTGAAATAATTAATGCAGTTCCTTCATTATCTCAATATTCGGCCTTCCTTAAGGAATCTATTTG
TCCCAGTCTTTCTGAACTGTTGGCTTGCCAAACATGCCTTGAAAATATGATTAATGATCTACACAGAGC
CATTACAGCTACACAGTCTGCAATGTTAATCAAGTTTGATTTAATATCTACATTACTATGCCTTATC
TTCACCTGCATTTGTGGGATCCAACATCTGGAACGAATAGGAAAGAAGCTGAATCTCTTTGACTCCCTTT
ATTTCTGCATTGTGACGTTTTCTACTGTGGGCTTCGGGATGTCACCTCTGAAACATGGTCTCCAAGCT
TTTTGTAGTTGCTATGATTTGTGTTGCTCTTGTGGTCTACCCATACAGTTTGAACAGCTGGCTTATTTG
TGGATGGAGAGACAAAAGTCAGGAGGAACTATAGTCGACATAGAGCTCAAAGTAAAAGCATGTCGTCC
TGTGTGCAGCTCACTGAAGATTGATTTACTTATGGATTTTTAAATGAATTCATGCTCATCTAGGCT
CCAGGATTATTATGTGGTGATTTTGTGCTCTACTGAAATGGATGTACAGTTTCGAAGGGTACTGCAGATT
CCAATGTGGTCCCAACGAGTTATCTACCTTCAAGTTTCAGCCCTTAAAGATCAAGACCTATTGAGAGCAA
AGATGGATGACGCTGAGGCTGTTTTATTCTCAGTAGCCGTTGTGAAGTGGATAGGACATCATCTGATCA
CCAAACAATTTGAGAGCATGGGCTGTGAAAGATTTTGTCCAAATGTCCTTTGTATGTCCAGATATTA
AAGCCTGAAAATAAATTTACATCAAATTTGCTGATCATGTTGTTGTGAAGAAGAGTTAAATACGCCA
TGTTAGCTTTAACTGTATATGCCAGCAACATCTACACTTATTACACTACTGGTTCATACCTCTAGAGG
GCAGTTTGGCGTCTGCTTGATTGGTGTAGGAGGGAGGATAATAAAAACATTTTGTGAATCCAGGTCCT



[View online >](#)

CGATACATTATGAATTCTACAGACATATGCTTTTATTAATATTACAAAGAAGAGAATTCAGCATTTA
 AAAACCAAGACCAGCAGAGAAAAAGCAATGTGTCCAGGTCGTTTTATCATGGACCTTCCAGATTACCTGT
 ACATAGCATAATTGCCAGCATGGTACTGTGGCTATAGACTTGCAAGATACAAGCTGTAGATCAGCAAGT
 GGCCCTACCCTGTCTCTTCTACAGAGGGAAGCAAAGAAATAAGAAGACCTAGCATTGCTCTGTTTTAG
 AGGTTGCAGATACATCATCGATTCAAACATGTGATCTTCTAAGTGACCAATCAGAAGATGAAACTACACC
 AGATGAAGAAATGTCTTCAAACCTAGAGTATGCTAAAGGTTACCCACCTATTCTCCATATATAGGAAGT
 TCACCCACTTTTTGTCTCTCCTCATGAAAAAGTACCATTTTGTCTGCTTAAGATTAGACAAGAGTTGCC
 AACATAACTACTATGAGGATGCAAAAGCCTATGGATTCAAAAATAAACTAATTATAGTTGCAGCTGAAAC
 AGCTGGAATGGATTATATAACTTTATTGTTCCCTCTCAGGGCATATTATAGACCAAGAAAGAACTTAAT
 CCCATAGTACTGCTATTGGATAACCCCTAGATGACTTACTCAGGTGTGGAGTGACTTTTGTGCTAATA
 TGGTGGTTGTGGATAAAGAGAGCACCATGAGTGCCGAGGAAGACTACATGGCAGATGCCAAAACCATTGT
 GAACGTGCAGACACTCTCAGGTTGTTTTCCAGTCTCAGTATTATCACAGAGCTAACTACCCCGCCAAC
 ATGAGATTCATGCAATTCAGAGCCAAAGACTGTTACTCTTGTCTTTCAAACCTGGAAAAGAAAGAAC
 GGGAGAGAGGCTCTAACTGGCCTTATGTTTCGACTGCCTTTTGTCTGCTGGGAGGTTTATGATCAG
 TATGTTGGACACTCTGCTGTATCAGTCATTTGTGAAGGATTATATGATTTCTATCAGGACTTCTGTTG
 GGACTGGACACTACACCAGGATCTGGGTTTCTTTGTTCTATGAAAATCACTGCAGATGACTTATGGATCA
 GAACCTTATGCCAGACTTTATCAGAAGTTGTGTTCTTCTACTGGAGATGTTCCATTGGAATCTACAGGAC
 TGAGTCTCAGAACTTACTACATCTGAGTCTCGAAAAATAGCATCACAATCTCAAATATCTATCAGTGTA
 GAAGAGTGGGAAGACACCAAGACTCCAAGAACAAGGGCACCACCGCAGCAACCACCGCAACTCAACAT
 CCAGTGATCAGTCGACCATCCCTTGTGCGGAGAAAAAGCATGCAGTGGGCCCGAAGACTGAGCAGAAA
 AGGCCCAAAACACTCTGGTAAAACAGCTGAAAAATAACCCAGCAGCGACTGAACCTCTACAGGAGGTCA
 GAAAGACAAGAGCTTGTGAACCTGTGAAAAATAGAATGAAACACTTGGGCTTTTCTACAGTGGGATAG
 ATGAAATGAATGATCATCAAAGTACCCTCTCATCTGATTAACCCATCTCCAGATACCAGAATAGA
 GCTGAATGATGTTGTATACTTAATTCGACCAGATCCACTGGCCTACCTTCAAACAGTGAGCCAGCTCGA
 AGAAACAGCATCTGCAATGTCACTGGTCAAGATTCTCGGAGGAACTCAACT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC239933 representing NM_001287820

Red=Cloning site Green=Tags(s)

MVDLESEVPPLPPRYRFRDLLLLGDQGWQNDDRVQVEFYMENTFKERLKLFFIKNQRSSLRIRLNFSLK
 LLSCLLYIIRVLLNPSQGNESHIFWVNRSLPLWGLQVSVALISL FETILLGYSYKGNIEWEQILRIPF
 ILEIINAVPFIISIFWPSLRNLFVPVFLNCWLAKHALENMINDLHRAIQRQSAMFNQVLIILISTLLCLI
 FTCICGIQHLEIRIGKKNLFDLSYFCIVTFSTVGFQDVTPEWSSKLFVAMICVALVVLPIQFEQLAYL
 WMERQKSGGNYSRHRQAQTEKHVVL CVSSSLKIDLLMDFLNEFYAHPRLQDYVVVILCPTMDVQVRRVLQI
 PMWSQRVIYLLQGSALKDQDLLRAKMDDAEACFILSSRCEVDRTSSDHQTLRAWAVKDFAPNCPLVYQIL
 KPENKFHIKFADHVVCEEFKYAMLALNCIPATSTLITLLVHTSRGFVCLIGVRREDNKNILLNPGP
 RYIMNSTDICYINITKEENSAFKNQDQQRKSNVSRSFYHGSPRLPVHSIIASMGTVIAIDLQDTSRCSAS
 GPTLSLPTESKEIRRPSIAPVLEVADTSSIQTCDLLSDQSEDETPDEEMSSNLEYAKGYPPSPYIGS
 SPTFCHLLHEKVPFCCLRLDKSCQHNYEDAKAYGFKNKLIIVAAETAGNGLYNFIVPLRAYRPKKELN
 PIVLLLDNPLDLDLRCGVTFANMVVDKESTMSAEDYMADAKTIVNVQTLFRLFSSLSIITELTHPAN
 MRFMQFRAKDCYSLALSKLEKKERERGSNLA FMFRLPFAAGRVSISMLDPLLQSFVKDYMISITRLLL
 GLDTPGSGFLCSMKITADDLWIRTYARLYQKLCSSSTGDVPIGIYRTESQKLTTSERKIASQSQISISV
 EEWEDTKDSKEQGHRSNHRNSTSSDQSDHPLLRKSMQWARRLSRKGPKHSGKTAEKITQQLNLNLYRS
 ERQELAEVLVKNRMKHLGLSTVGYDEMNDHQSTLSYILINSPDTRIELNDVVYLIRPDLAYLPNSEPSR
 RNSICNVTGQDSREETQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001287820

ORF Size: 3204 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_001287820.3](#)

RefSeq Size: 5774 bp

RefSeq ORF: 3207 bp

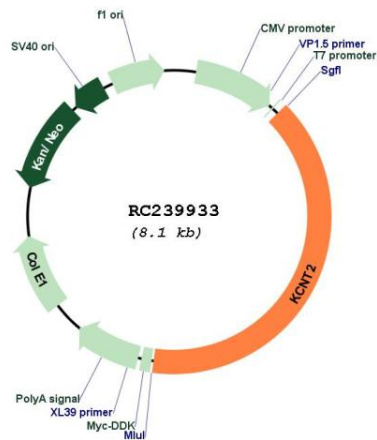
Locus ID: 343450

UniProt ID: [Q6UVM3](#)

Cytogenetics: 1q31.3
Protein Families: Druggable Genome, Ion Channels: Potassium, Transmembrane
MW: 123 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 RC239933