

Product datasheet for **RG239933**

KCNT2 (NM_001287820) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNT2 (NM_001287820) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KCNT2
Synonyms:	EIEE57; KCa4.2; SLICK; SLO2.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG239933 representing NM_001287820. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
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TCTCATATCTTTGGGTGAACAGAAGTCTACCTTTGTGGGGCTTACAGGTTTCAGTGGCATTGATAAGT
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CCCTTCATCTTGAAATAATTAATGCAGTTCCTTCATTATCTCAATATTCTGGCCTTCCTTAAGGAAT
CTATTTGTCCCAGTCTTTCTGAACTGTTGGCTTGCCAAACATGCCTTGAAAATATGATTAATGATCTA
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AAAGAAGAGAATTCAGCATTTAAAAACCAAGACCAGCAGAGAAAAAGCAATGTGTCCAGGTCGTTTTAT
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 CGACCAGATCCACTGGCCTACCTTCCAACAGTGAGCCAGTCGAAGAAACAGCATCTGCAATGTCACT
 GGTCAAGATTCTCGGGAGGAAACTCAACT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC

Protein Sequence:

>Peptide sequence encoded by RG239933
 Blue=ORF Red=Cloning site Green=Tag(s)

MVDLESEVPPLPPRYRFRDLLLLGDQGWQNDRRVQVEFYMENTFKERLKLFFIKNQRSSLRIRLNFSL
 KLLSCLLYIIRVLLLENPSQGNEWSHIFVWNRSLPLWGLQVSVALISL FETILLGYLSYKNGIWEQILRI
 PFILEIINAVPFIISIFWPSLRNLFVVPFLNCWLAKHALENMINDLHRAIQRQTSAMFNQVILISTLL
 CLIFTICIGIQLERIGKLNLFDSL YFCIVTFSTVGFVDVTPETWSSKLFVVMICVALVVLPIQFEQ
 LAYLWMERQKSGGNYSRHRAQTEKHVVL CVSSLKIDLLMDFLNEFYAHPRLQDYVVVILCPTEMDVQVR
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 LYVQILKPENKFHIFADHVVCEEFKYAMLALNCICPATSTLITLLVHTSRGQFVCLIGVRREDNKN
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 SIITELTHPANMRFMQFRAKDCYSLALSKLEKKERERGSNLAFMFRLPFAAGRVFSISMLDTLLYQSFV
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TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIIRSNAVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites:

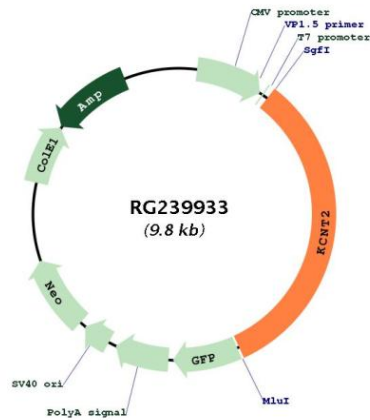
Sgfl-MluI

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).
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 RG239933