

## Product datasheet for RR201402

### Kcnt1 (NM\_021853) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnt1 (NM_021853) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcnt1
Synonyms:	rSlo2; Slack
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RR201402 representing NM_021853 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGCGGGCCAAGCTGCCGCGCTCACCGTCCGAGGGCAAGGCGGGTCCGGGGACACCCAGCCGGCT  
CTGCAGCCCTGAGGAGCCGCACGGACTCAGCCCGCTACTGCCACCCCGGGCGGGGGCTCCGTGGGCAG  
CGAGCTGGGCCAGAGGCTTCATGTGGAAGATTTACGCTGGACTTCCCTTTCTCAGGTCCAGGTGAA  
TTCTATGTCAATGAGAACACCTCAAAGAACGCCTCAAGCTGTTCTTCATCAAAAACCAGAGATCCAGCC  
TGAGGATCCGGCTGTTCAACTTCCCTCAAGCTCCTCACCTGCCTGCTGTACATTGTCCTGTCCTGCT  
CGACAACCAGACCAGGGCATCGGATGCTGGGGCTGCACGAAGTAACTACACGTTCAATGGTTCGTCC  
TCGGAGTTCACCTGGGCTCCCATCCTGTGGGTGGAGAGGAAAATGGCTCTGTGGGTGATCCAGGTCAATG  
TGGCCACAATAAGCTTCTTAGAGACCATGCTCCTCATTACCTCAGCTACAAAGGCAACATCTGGGAGCA  
GATATTCATGTGTCTTTCGTCTTGAGATGATCAACACACTGCCCTTCATCATCACGGTCTTCTGGCCA  
CCTCTCCGGAACCTGTTTCATCCCTGTGTTTCTCAACTGCTGGCTGGCCAAGCAGCCCTGGAGAACATGA  
TCAATGACTTCCACCGTGCCATCCTGCGCACACAGTCAGCCATGTTCAACCAGGTGCTCATCCTGTTCTG  
CACCTGCTGTGCTGGTCTTACAGGGACCTGTGGGATTCAGCACTTAGAGCGGGCAGGTGGCAACTTG  
AACTTGTGACCTCCTTCTACTTCTGCAATTGTGACTTTCTCAACCGTGGGCTTCGGTGATGTGACCCCA  
AGATCTGGCCATCCCAGCTCCTGGTGGTATCCTGATCTGTGTACCCCTTGTGGTGTCTCCACTGCAGTT  
TGAAGAGCTTGTCTACCTCTGGATGGAGCGGCAGAAGTCAGGGGCAACTATAGCCGCCACCGAGCACGG  
ACAGAGAAGCATGTGGTCTGTGTGAGCTCCCTCAAGATCGATCTCCTCATGGATTTCTGAATGAGT  
TCTATGCCACCCCGTCTCCAGGACTACTACGTGGTATCCTGTGTCCCTCGGAAATGGATGTCCAGGT  
GCGCAGGGTCTACAGATTCCCCTGTGGTCCCAGCGTGTCTACCTCCAGGGCTCTGCCCTCAAGGAC  
CAGGACCTCATGCGAGCTAAGATGGACAACGGAGAGGCCTGCTTATCCTCAGCAGCAGGAATGAGGTGG  
ACCGCACAGCTGCGGATACCAGACCATCCTTCGAGCCTGGGCTGTGAAAGACTTTCGCCCAACTGCC  
CCTCTATGTCCAGATTCTCAAGCCGAAAACAAGTTTCACGTCAAATTTGCTGACCATGTGGTGTGCGAG



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GAAGAGTGCAAGTACGCCATGCTGGCCCTGAACTGCATCTGCCCCGGCCACCTCCACCCTCATCACCTGC  
TGGTGCACACATCCCGTGGCCAGGAAGGACAGGAGTACCAGAGCAGTGGCAGCGCATGTACGGGCGCTG  
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GGGCAGGCACCTTACGAAGGGCCCTCCCGCTCCAGTGCACAGCATCATCGCCTATGGTGGCCATGG  
ACCTGCAGAACACAGATTGCCGGCCCTCCAGGGTGGCAGTGGTGGGGGGCGGCAAGCTGACTCTGCC  
CACTGAGAACGGCTCTGGCAGTCGGCGTCCCAGCATCGCACCCGTTCTGGAGTTGGCAGACAGCTCAGCC  
CTGTTGCCCTGCGACCTGCTGAGTGACCAATCAGAGGATGAGGTGACACCCTCAGACGACGAGGGCTCT  
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CGGGAGGCAAGGGGCCCTGGGGCACACGGGCTGCGTCTGGCGGTGGCAGCACCCATGGCCGTACGGGG  
GCAGTGTGACCCGGTGGAGCACCCACTACTGCGCCGAAGAGCCTGCAGTGGGCCCGCAAGCTGAGCCG  
CAAGAGCAGCAAGCAGGCGGGGAAGGCACCCATGACCACAGACTGGATCACCCAGCAGCGACTCAGCCTG  
TACCGGCGCTCAGAGCGCCAGGAGCTCTCGGAGCTGGTCAAGAACC GAATGAAGCACCTGGGGCTGCCCA  
CCACTGGCTACGAGGACGTAGCAAATTTAACAGCCAGTGTGATGAATCGGGTAAACCTGGGATATTT  
GCAAGATGAGATGAATGATCATCACCAGAACCCCTTTCCTATGTAATCAACCCCCCGCAGACACA  
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AGAGTCGGAAGCAGCTGCAGCAAACTGTATCCTGTAATCCTGAGACCCGGGATGAGACCCAGCT  
CC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA

**Protein Sequence:** >RR201402 representing NM\_021853  
Red=Cloning site Green=Tags(s)

MARAKLPRSPSEKAGPGDTPAGSAAPEEPHGLSPLLPTRGGSVGSVDVQRLHVEDFSLDSSLVQVQVE  
 FYVNTFKERLKLFFIKNRSSLRIRLFNFKLLTCLLYIVRLLDNDPDQIGCWGCTKYNYTFNGSS  
 SEFHWAPILWVERKMLWVIQVIVATISFLETMLLIYLSYKGNIEWEQIFHVSFVLEMINTLPIITVFWP  
 PLRNLFIPIVFLNCWLAKHALENMINDFHRAILRTQSAMFNQVLILFCTLLCLVFTGTGCGIQHLERAGGNL  
 NLLTSFYFCIVTFSTVGFVDVTPKIWPSQLLVILICVTLVVLPLQFEELVYLWMERQKSGNYSRHRAR  
 TEKHVVLCVSSLKIDLLMDFLNEFYAHPRLQDYVYVILCPSEMDVQVRRVLQIPLWSQRVIYLQGSALKD  
 QDLMRAKMDNGEACFILSSRNEVDRTAADHQITLRAWAVKDFAPNCPLYVQILKPENKFHVKFADHVVCE  
 EECKYAMLALNCICPATSTLITLLVHTSRGQEQESPEQWQRMYGRCSGNEVYHIRMGDSKFFREYEGKS  
 FTYAAFHAHKYGVCLIGLKREENKSILLNPGPRHILAASDTCFYINITKEENSAFIFKQEEKQNRRLA  
 GQALYEGSRLPVHSIIASMVAMDQNTDCRPSQGGSGGGGKLTPTENGSGRRPSIAPVLEADSSA  
 LLPCDLLSDQSEDEVTPSDDEGLSVVEYVKGYPNSPYIGSSPTLCHLLPVKAPFCCLRLDKGCKHNSYE  
 DAKAYGFKNKLIIVSAETAGNLYNFIVPLRAYRSRRELNPVLLLDNKPDHFLAICCFPMVYMEG  
 SVDNLDSSLQCGIYADNLVVVDKESTMSAEEDYMADAKTIVNVQTMFRLFPSLSITTELTHPSNMRMQ  
 FRAKDSYSLALSKLEKQERENSNLAFMFRLPFAAGRVSISMLDITLLYQSFVKDYMITITRLLGLDTT  
 PGSGYLCAMKVTEDDLWIRTYGRLFQKLCSSSAEIPIGIYRTECHVFSSEPHDLRAQSQISVNMEDCEDT  
 REAKGPWGTRAASGGGSTHGRHGSADPVEHPLLRRKSLQWARKLSRKSSKQAGKAPMTTDWITQQRLS  
 YRRSERQELSELVKNRMKHLGLPTTGYEDVANLTASDVMNRVNLGYLQDEMNDHHQNTLSYVLINPPDPT  
 RLEPNDIVYLIRSDPLAHTVSSSQSRKSSCSNKLSSCNPETRDETQL

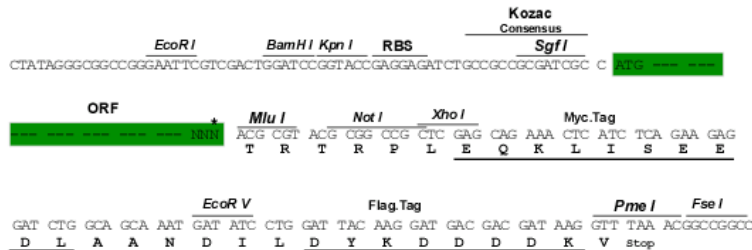
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



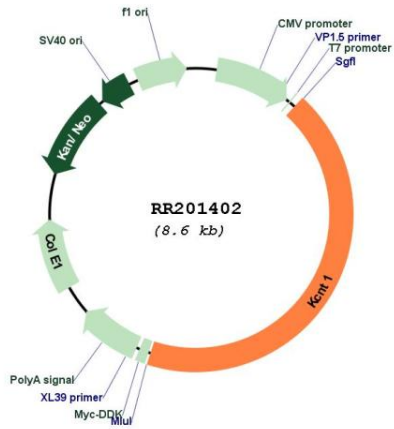
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_021853

**ORF Size:** 3711 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_021853.1</a> , <a href="#">NP_068625.1</a>
<b>RefSeq Size:</b>	3714 bp
<b>RefSeq ORF:</b>	3714 bp
<b>Locus ID:</b>	60444
<b>UniProt ID:</b>	<a href="#">Q9Z258</a>
<b>Cytogenetics:</b>	3p13
<b>MW:</b>	139.6 kDa
<b>Gene Summary:</b>	Na(+)-activated potassium channel; may be involved in regulating the firing properties of neurons [RGD, Feb 2006]

Product images:



Circular map for RR201402