

## Product datasheet for **MR224899**

### Kcnu1 (NM\_008432) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Kcnu1 (NM\_008432) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Kcnu1  
**Synonyms:** Kcnma3; mSlo3; Slo3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR224899 representing NM\_008432  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGATCGCC

ATGTCTCAAACATTGCTAGACAGTTTAAATCAGAAGGAGTTGACGGAAACGTCATGTACAATCGAAATCC  
 AGGCAGCGTTCATTCTTCTCCTTGGCGACTTCTTCGGGGGACTCATCATCTTATTCTTTTCAGAAT  
 AGCCTTGGAAAAGCTCAAGAAGTTGGAAATACGTCAAGGGGCCAAGAGGACTCTTGGAACTATTCTCATCA  
 CGTAGAATCGAGGCTAATCCTTTGAGGAACTTTACTTTTCATGGAGTATTCGTCAGCGCATCGAAATGC  
 TGCTTTCTGCACAGACCGTCGTGGGGCAAGTGTGGTGATCCTTGTCTTTGTAAGCATCGGGTCTCT  
 TGTGATCTATTTCAATCAATTCAATGGATCCTGTTCAAGGTGTTCTTCATATGAAGACAAAATTGTCCAT  
 GTGGATTTGAGTTCAACGCTTTCTTTAGCTTCTATTTTGGGTTGAGTTTTGGGAGCTGAAGACAAGA  
 TCAAGTTCTGGTTGGAGATGAATTCAATTGTAGACATTTTACCATCCCGCCAACCTTTATTTCTTATTA  
 TTTGAAGAGTAATTGGCTAGGTTTGGAGATTTCTAAGAGCTCTGCGGTTGCTCGAACTCCCTAAAATCTTA  
 CAGATCCTACAAGTCATCAAGACCAGCAATTCAGTGAAGCTTTCCAACTGTTGTCAATAGTTATCAGTA  
 CCTGGTTCACGGCAGCAGGATTCCTTACCTGGTGGAAAATTCTGGTGACCCCTGGCTCAACGGAAGAAA  
 CTCACAGACTATGTCATACTTTGAGTCTATTTATCTGGTGACAGCAACAATGTCAACTGTTGGCTTTGGG  
 GACGTGGTGGCCAAGACATCCCTAGGACGGATTTTATTGTTTTTCTCACCCCTGGGAGTTTGATACTAT  
 TTGCAAACACTACATTCAGAAAATGGTGGAGCTTTTTCTACCAGGAAGAAATACACCAAGCCCTACGAAGC  
 AGTCAAAGGAAAAAAGTTTCATCGTGGTCTGTGGAAACATCACAGTTGACAGTGTTACTGCTTTCTGAGG  
 AATTTTCTCCACTGGAAGTCCGGGGAAATCAATATTGAGATCGTATTCTTGGAGAGACTCTCCCTTGCT  
 TGGAACTGGAGACCTTACTGAAGTGCCACACATCCTGTACCAACTTCGTATGCGGCACCGCACTGAAGTT  
 CGAGGATCTGAAGCGAGTTGCAGTGGAGAACTCGGAGGCGTGCCTGATTCTAGCCAACCATTTCTGTAGT  
 GACTTACATGACGAAGACAACCTCAAACATTATGAGGGTGTCTCGATCAAGAATATTATCCACAGACCA  
 GAGTCATCATTAGATACTTCAGTCTCAAACAAGTTTTCTGTCAAAAATCCCAACTGGGACTGGAG  
 TGCTGGAGACAATATCCTCTGCTTTCAGAGCTAAAGCTCGGATTTATCGCCAAGGCTGCTTGGTGCCA



[View online »](#)

GGGCTGTGCACCTTTCTCAGACTCTGTTCAATTGAACAAAACAAAAGGTTTTCTAAACATCCCTGGC  
AAAAACATTTCTGAATGGCTTGAAGAACAAGATTCTGACACAGCGCCTCTAACGACTTCGTGGGGAT  
GACATTTCCCGAGTCTCCCGGCTCTGCTTTGTGAAGCTAAATCTCATGCTGATCGCCATCCAACACAAG  
CCCTTCTTTACAGTTGTTGCACTCTGATAAACCATCATCCAAGTGAGGCTGAATAAGGACACCT  
TAGGGTCTTTCATTGCGGACTCCTCAAAGCCGTCAAAGGGCTTTCTTTACTGTTCCAACGTGCACAG  
CGATGTGTGCAATCCTGAGCTAATTGAAAAGTGAAGTGTAAAATCAAGAGCCGACAACAACATCATAGCA  
CAACAGAAATTCACACTTGTTTTCAAGAGAACAGCCTAGTTTGATCACCATTACAACCAACAGACCAAC  
GACAAACGACACAGTGGATGATACCGACATGCTGGACAGCAGTGGCATGTTTCACTGGTGCAGAGCAATG  
CCCTTGGACAAGGTGTTCTGAAACGAAGTGAGAAGGCAAAACACGAGTTTCAGAACCACATTGTAGTAT  
GCGTGTGGAGATGCCAATGTACCCTGGTGGGCTTCGGAATTTGCTGATGCCCTGAGAGCCAGCAA  
CTACACCCGCGAGGACTGAAGGACATTGTTTTATTGGGTCTCTGGAGTACTCCAGAGAGAATGGCGA  
TTTCTCCGAACTTTCCAAGATACACATTATGCCTGGATCTGCACTCTACATGGGAGATCTGATTGCAG  
TCAATGTAGAGCAGTCTATGTGCGTCATCTTAGCCACACCCTACAAGGCACTGAGCAGCCAGATTCT  
GGTGGACACAGAGCCATCATGGCCACCCTCAACATCCAGTCCCTGCGGATCACCAGTCTACTCCAGGG  
TCTTCAAAGTCAGAAGTAAAGCCATCATCTGCCTTTGATAGTAAAGAAAGGAAGCAAAGTACAAACAGA  
TCCCCATTCTCACTGAACTGAAGAATCCCTCCAACATCCACTTTATTGAGCAGATGGGCGGACTGGATGG  
AATGCTCAAAGGGACTAGCTTGCATCTCAGCACTTCTTTCTCCACCGGTGCTGTCTTTTCAGACACCTTC  
TTGGATTCTCTCCTGGCCACGTCCTTCTACAATTACCATGTGCTGGAAATTAATTCAGATGCTAGTGACTG  
GAGGCATAAGCTCTGAGATGGAACACTATTTGGTTAAGGAGAAGCCCTATAAGACAACACTGACGACTATGA  
GGCAATCAAGTCTGGGAGGACGCGGTGTAAGCTGGGACTCCTCTCTTTAGACCAAACCGTTCTATCAGGC  
GCTTATACCGTATGATTGATGAAGAGGAACCCAGCCAAGAACAACAAAAGTTTTGTGATCACCAGGCCATC  
CAATGAGTGCCACCTGCTGCCCTCAGATCTCGTGTGTTTGTGCCATCCCTTTCAACACCACCTGTGGCAAA  
TCAGACAGCAGTCTTCAATTCAGGCTCAAACAACACTCTACAAACGCGACGACGCCATTGGCCCAGGGGT  
CGAATTTCTTCGATTCGACCATGCCGACGAGTCCCACGATCTTTACCCAGTCGACGACACGGGAGAGAG  
GTGGTCTCAGCACCACCACTCCCGAGTCTATCCTTTGGACACGTTAGATGCCAGTGATATTGTTCAAGAA  
AAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR224899 representing NM\_008432  
 Red=Cloning site Green=Tags(s)

MSQTLDSL NQKELTETSCTIEIQAAFILSSLATFFGGLIILFLFRIALKSSRSWKYVKGPRG LLELFSS  
 RRIEANPLRKL YFHGVFRQRIEMLLSAQTVVGVQLVILVFVLSIGSLVIYFINSMDPVRRCSYEDKIVH  
 VDL SFNAFFSFYFGLRFWAAEDKIKFWLEMNSIVDIFTIPPTFISYYLKS NWLGLRFLRALRLEL PKIL  
 QILQVIKTSNSVKLSKLLSIVISTWFTAAGFLHLVENS GPDWLN GRNSQ TMSYFESIYLV ATMSTVGF  
 DVVAKTSLGRIFIVF FTLGSLILFANYIPEMVELFSTRKKYTKPYEAVKGGKFI VVCGNITVDSVTAFLR  
 NFLHWKSGEINIEIVFLGETLPCELELETL LKCHT SCTNFVCGTALKFEDLKRVAVENSEACLILANHFCS  
 DLHDEDNSNIMRVL SIKNYPQTRV I IQILQS QNKVFLSKIPNWDWSAGDNILCF AELKLG FIAQGCLVP  
 GLCTFL T TLFIEQNQKVPKHPWQKHFLNGLKNKIL TQRLS NDFVGM TFPQVSRLCFVKLNLMLIAIQHK  
 PFFHSCCTLILNPSSQVRLNKDTL GFFIADSSKAVKRAFFYCSNCHSDVCNPELIGKCNCKIKSRQQLIA  
 PTIMVMKSSLTDFTTSSHIHASMSTEIHTCF SREQPSLITIT TNRPTTNDTVDDTMDL DSSGMFHWCRAM  
 PLDKVVLKRSEKAKHEFQNHIVCVFGDAQCTLVGLRNFV MPLRASNYTRQELKDIVF IGSLEYFQREWR  
 FLRNFPKIHIMP GSALYMGDLI AVNVEQCSMCVILATPYKALSSQILVDTEAIMATLNIQSLRITSPTPG  
 SSKSEVPSSAFDSKERKQRYKQIPIL TELKNPSNIHFIEQMGLDGMLKGTSLHLSTFS TGA VSDTF  
 LDSLLATSFYNYHVVELLQMLVTGGISSEMEHYLVKEKPYKTTDDYEA IKSGRTRCKLGLLSLDQTVLSG  
 INPRKTFGQLFCGSLDNFGILCVGLYRMIDEEEPSQEHRFVITRPSNECHLLPSDLVFCAIPFNTTCGK  
 SDSSPSIQANNSTNATTPLAQGSNFFD SHHADESHDLPVDDTGERWSQHHHSRVYPLDTLDASDIVQE  
 K

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9094\\_e08.zip](https://cdn.origene.com/chromatograms/mm9094_e08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

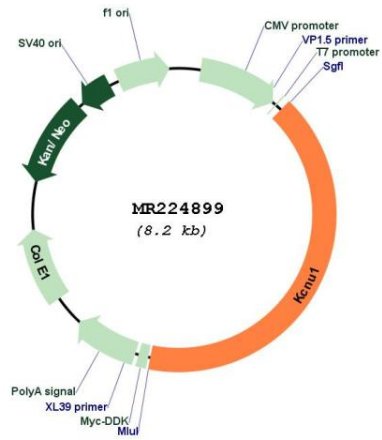


**ACCN:** NM\_008432

**ORF Size:** 3363 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_008432.3</a> , <a href="#">NP_032458.3</a>
<b>RefSeq Size:</b>	3548 bp
<b>RefSeq ORF:</b>	3366 bp
<b>Locus ID:</b>	16532
<b>UniProt ID:</b>	<a href="#">O54982</a>
<b>Cytogenetics:</b>	8 A2
<b>MW:</b>	126.9 kDa
<b>Gene Summary:</b>	Testis-specific potassium channel activated by both intracellular pH and membrane voltage that mediates export of K(+). Represents the primary spermatozoan K(+) current. In contrast to KCNMA1/SLO1, it is not activated by Ca(2+) or Mg(2+). Critical for fertility. May play an important role in sperm osmoregulation required for the acquisition of normal morphology and motility when faced with osmotic challenges, such as those experienced after mixing with seminal fluid and entry into the vagina.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR224899