

Product datasheet for **MC221426**

Kcnc3 (NM_008422) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnc3 (NM_008422) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Kcnc3
Synonyms:	Kcr2-3; KShIIID; Kv3.3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC221426 representing NM_008422
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTCAGTTCAGTGTGCGTCTGGTCTGTTCCGCGGGCCAGGGACCGCAAGCAGCAGCCTCAGCCGG
 TGCCAACGCCGACGCCGCTGAGTCTCACCGCGCCTCTGCCGCGCCGACGACGAGCAGTGTCTCA
 GCCCGGCACTGCCGCTCCCGCGGGTCCCCCGCTTTCCTGCGGGCTGGGGGCGCGGTGCCGAGCCA
 TGCCCCGGGTGCCGGCGGTGGCCATGGGGCGGCACGGCGCGCGCGGCGACAGCGGTAAAGATCGTGA
 TCAACGTGGGCGGCTGCCCATGAGACGTACCGCTCCACGTTGCGCACCTGCCAGGGACCAGACTGGC
 CGGGCTGACCGAGCCGAGGCGGGCGCGCTTTGACTACGACCCGGGCACGGACGAGTCTTCTTCGAC
 CGTACCCCGGGCTCTTCGCTACGTGCTCAACTACTACCGCACCGCAAAGTGCCTGCCCGGCCGACG
 TGTGCGGGCCGCTCTTCGAGGAGGAGCTGGGCTTCTGGGCATAGACGAGACGGACGTGGAGGCCTGCTG
 CTGGATGACCTATCGCCAGCACCGTACGCTGAGGAGGACTGGACTCTTTCGAGCCCCGACTCCTCG
 GCCAACGCCAACGCCAACGCCGAGGCGCGCACGATGCGGGACTGGACGACGAGGCGGGCGCAGGAGGCG
 GCGGCCTGGACGGGGCAGGCGGGGAGCTCAAGCGTCTGTGTTTTTCAGGACGCGGGCGGAGGTGCCGAGG
 ACCTGCCGGGGCGCGGGCGGGCGGGCGGCACCTGGTGGCGGCCTGGCAGCCCCGTGTGTGGCGCCTT
 TTTGAGGACCCCTACTCGTCGCGGGTCCAGGTATGTGGCCTTCGCTCCCTATTTTATCCTCATCT
 CCATCACCACCTTCTGCCTGGAGACACAGAGGGCTTCATCCACATCAGCAACAAGACGGTGACGAGGC
 CTCCCCAATCCCTGGGGTCCCCCGGAGAATATCACCAACGTGGAGTGGAGACGGAACCCCTTCTTGACC
 TACGTGGAAGCGTGTGTGGTCTGGTTCACCTTTGAGTTTCTCATGCGGGTACCTTCTACTTGGAGGT
 AGGTGGAGTTTCTCAAAGCAGCCTGAACATCATCGACTGCGTGGCCATCTTGCCCTTCTACTTGGAGGT
 GGGCCTGTCAGGTCTCAGCTCAAAGCTCCAAGGACGTGCTGGGCTTCTGCGTGTCTCGCTTCTGCTG
 CGCATCCTTCGTATCTTCAAGCTGACCCGTCACTTCGTGGGGTCTGCGTGTGCTGGCCACACGCTCCGGG
 CCAGCACCAACGAATTCTGTACTCATCATCTTCTGGCTCTGGGGTCTCATCTTGGCACCATGAT
 CTACTATGCCGAACGCATCGGGCTGATCCTGACGACATCCTGGGCTCCAACCACACCTACTTCAAGAAC
 ATCCCCATCGGCTTCTGGTGGGCTGTGGTACCATGACGACACTGGGCTATGGAGACATGTATCCAAGA
 CGTGGTCTGGGATGCTGGTTGGGCACTGTGTCCCTGGCTGGTGTGCTGACCATTGCCATGCCCGTGGC
 TGTCAATTGTCAACAATTCGGCATGTACTATTCACTGGCTATGGCCAAGCAGAAATTGCCAAGAAGAAA
 AACAAACATATCCAGGCCCGCAGCCTGGCTACCCAACACTGCAAGCCTGACCCCCGCTCCAC
 CCCACCACACCCACCACGGCAGCGGTGGCATAAGCCACCGCGCCATCACCCCTCCTTCCATGGG
 GGTGAATGTGGCCGGGGCTACCCACCTGGACCCACACACCCCGGGTGTCAAGGGTGGTGTGGG
 GGCTGGGAATCATGGGATTGCCTCCTCTGCCAGCCCCTGGTGGAGCCCTGCCATTGGCTCAAGAAGAGG
 TGATTGAAACCAACAGGGCAGACCCCGTCCCAATGGAGACCCTGCAGCAGCCGACTGGCCATGAGGA
 CTGCCCTGCCATCGACCAGCCAGCATGTCTCCAGAAGACAAGAGCCCAATCACTCCCGGAAGCCGGGT
 CGCTACAGCCGGGACCGAGCTTGCTTCTTGTACAGACTATGCCCTTCCCCTGATGGTCCATCCGAA
 AAGGTTACGAGAAGTCCCGCAGCCTGAGCAGATTGTGGGCTGAGCGGGGTGTCCCTGCGCCTCGCGCC
 CCTCGCACCCCCCTGGCTCTCCCCGGCCACGCGCCGAGCTCCCCGACCCCTGCCCTCATCTC**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_008422
Insert Size: 2310 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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_008422.2 , NP_032448.2
RefSeq Size:	5072 bp
RefSeq ORF:	2310 bp
Locus ID:	16504
UniProt ID:	Q63959
Cytogenetics:	7 28.85 cM
Gene Summary:	<p>Voltage-gated potassium channel that plays an important role in the rapid repolarization of fast-firing brain neurons. The channel opens in response to the voltage difference across the membrane, forming a potassium-selective channel through which potassium ions pass in accordance with their electrochemical gradient. The channel displays rapid activation and inactivation kinetics (PubMed:18539595, PubMed:26997484, PubMed:24218544). It plays a role in the regulation of the frequency, shape and duration of action potentials in Purkinje cells (PubMed:15217387, PubMed:18448641, PubMed:24218544). Required for normal survival of cerebellar neurons, probably via its role in regulating the duration and frequency of action potentials that in turn regulate the activity of voltage-gated Ca(2+) channels and cellular Ca(2+) homeostasis (PubMed:24218544). Required for normal motor function (PubMed:16923152, PubMed:18448641). Plays a role in the reorganization of the cortical actin cytoskeleton and the formation of actin veil structures in neuronal growth cones via its interaction with HAX1 and the Arp2/3 complex (PubMed:26997484).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (1).</p>