

Product datasheet for MR221486

Kcnk4 (NM_008431) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnk4 (NM_008431) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcnk4
Synonyms:	MLZ-622; Tex40; TRAAK; TRAAKt
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR221486 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGCAGCACCACTCCTGGCTCTGCTGGCACTGGTGTGCTTTACTTGGTATCTGGGGCTCTAGTGT
TCCAGGCTCTGGAGCAGCCTCACGAGCAGCAGGCTCAGAAGAAAATGGATCATGGCCGAGACCAGTTTCT
GAGGGACCATCCCTGTGTGAGCCAGAAGAGCCTGGAGATTTTCATCAAGCTCCTGGTTGAAGCCCTGGGA
GGGGCGCAAACCCAGAAACCAGCTGGACCAATAGCAGCAACCACTCATCAGCTTGAACCTGGGCAGCG
CCTTCTTTTTCTCGGGACCATCATCACTACCATCGGCTATGGCAATATAGTCTTACACACAGATGCCGG
GGTCTCTTTGTATCTTCTATGCACTGGTGGGATCCCACTGTTCCGGATGCTGCTGGCGGAGTCCGG
GACCGGCTGGGCTCCTCTCTGCGCCGGGCATCGGCCACATCGAAGCAATCTTCTTGAAGTGGCATGTGC
CACCGGGCTGGTGAGAAGTCTGTCCGCAGTGTCTTCTGCTGATCGGCTGCCTGCTCTTTGTCTCTCAC
TCTACCTTCGTGTTCTCCTACATGGAGAGCTGGAGCAAGTTAGAAGCCATCTACTTTGTTATAGTGACT
CTCACCAGTGTAGGCTTTGGCGATTATGTACCCGGCGATGGCACCAGGAGCAACTCTCCAGCCTACCAGC
CGCTGGTGTGGTCTGGATCTTGTGGCTAGCCTACTTCGCCTCAGTGCTCACCACCATCGGCAACTG
GTCACAGTGACAGCGAGTGACCCAGCAACTGGGCCAGCAGCCCGCCAGAGAAGGAGCAACCAC
TCCTGCCCTCCTCTTTCGCGCACCCGCTGCTGTTGTTGAGCCAGCCGGCAGGCCCGGCTCCCTGCACC
CGCAGAGAAGGTTGAGACTCCGTCGCCGCCACGGCCTCAGCTCTGGATTACCCAGTGAGAATCTGGCC
TTCATCGACGAGTCTCAGACACGAGAGTGAGCGTGGCTGTGCCTGCCTCGGGCTCCTCGGGGTCCGC
GCCGACCAACCCATCCAAAAGCCTTCCAGACCCGGGGTCTGGGCGACTCCGAGACAAGGCCGTGCC
GGTG

ACGGTACGGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR221486 protein sequence
 Red=Cloning site Green=Tags(s)

MRSTTLLALLALVLLYL VSGALVFQALEQPHEQQAQKKMDHGRDQFLRDHPCVSQKSLIEDFIKLLVEALG
 GGANPETSWTNSSNHSSAWNLSAFFFFSGTIITTTIGYGNIVLHTDAGRLFCIFYALVGIPLFGMLLAGVG
 DRLGSSLRRGIGHIEAIFLKHVPPGLVRSLSAVLFLIGCLLVLTPTTFVFSYMESSWSKLEAIYFVIVT
 LTTVGFVDYVPGDGTGQNSPAYQPLVWFILFGLAYFASVLTTIGNWLRVSRRTAEMGGLTAQAASWT
 GTVTRVTRQRTGPSAPPPEKEQPLLPSLLPAPPVVEPAGRPGSPAPAEEKVETPSPTASALDYPSENLA
 FIDESSDTQSERGCALPRAPRGRRRPNPSKKPSRPRGPGRLRDKAVPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_008431

ORF Size: 1197 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_008431.3](#)

RefSeq Size: 1757 bp

RefSeq ORF: 1197 bp

Locus ID: 16528

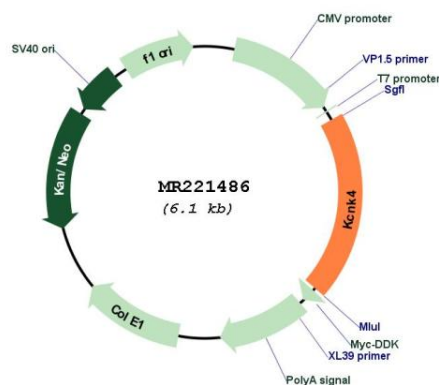
UniProt ID: [O88454](#)

Cytogenetics: 19 5.08 cM

MW: 43.1 kDa

Gene Summary: Voltage-insensitive potassium channel (PubMed:9628867). Channel opening is triggered by mechanical forces that deform the membrane. Channel opening is triggered by raising the intracellular pH to basic levels (By similarity). The channel is inactive at 24 degrees Celsius (in vitro); raising the temperature to 37 degrees Celsius increases the frequency of channel opening, with a further increase in channel activity when the temperature is raised to 42 degrees Celsius (By similarity). Plays a role in the sensory perception of pain caused by pressure (PubMed:19279663). Plays a role in the perception of pain caused by heat (PubMed:19279663).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR221486