

Product datasheet for **MR206777**

Kcnn4 (NM_008433) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnn4 (NM_008433) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcnn4
Synonyms:	IK1; IKCA1; KCa3.1; KCA4; mIKCa1; SK4; SKCas
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR206777 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGCGGGGAGCTGGTGACTGGCCTGGGGCCCTGAGACGGAGAAAGCGCCTGCTGGAGCAGGAGAAGA
 GGGTGGCCGGCTGGGCGTTGGTCTGGCGGGAAGTGGCATCGGACTCATGGTTCTGCACGCTGAGATGTT
 GTGGTTCTGGGCTGCAAGTGGGTGCTGTACCTGCTCCTGGTTAAGTGTGGTGGATCACCCTGTCCACTGCC
 TTCTCTTTGTCTTATTGTGGTCTTCCATGCCAAGGAGGTCCAGCTGTTGATGACTGACAACGGGCTCC
 GGGACTGGCGCTGGCGCTGACCCGGCGCAGGTGGCGCAGATCCTGCTGGAGCTGTTGGTGTGGGGGT
 GCACCCGGTGCCCTACGGAGCCCGCACTGCGCCCTGGCGGGGAGGCCACCGACGCGCAGCCCTGGCCG
 GGTTTCTGGGCGAAGGCGAGGGCTGTGTCCCTGGCCATGCTCCTGCGTCTCTACCTGGTCCCGCGG
 CGGTGCTGCTGCGCAGCGGGTCTGCTCAACGCGTCTACCGCAGCATCGGGGCGCTCAACCAAGTCCG
 CTTCCGCCACTGGTTCGTGGCCAAGCTGTACATGAACACGCACCCGGTGCCTGCTGCTGGGCCTCAGC
 CTGGGTCTCTGGCTACCCACAGCTTGGGTGCTGTCTGTGGCTGAGAGGCAGGCTGCAATGCCACGGGGC
 ACCTCACAGACACTGTGGCTGATCCGATCACATTCCTGACCATTGGCTATGGGGACGTGGTACCTGG
 CACCATGTGGGCAAGATTGCTGCCTGTGCACCGGAGTATGGGGTCTGCTGCACAGCTCTCCTGGT
 GCTGTGGTGGCTCGGAAGCTGGAGTTCAACAAGGCGGAGAAACACGTGCACAACCTCATGATGGACATCC
 ATTATGCCAAAGAGATGAAGGAGTCAAGCGCGCGGCTGCTGCAGGAAGCTGGATGTAACAAGCACAC
 TCGAAGGAAGGACTCCCGGGTCCCGCAGACATCAGCGCAAGATGCTGGCCGCCATCCACAGTTCGCG
 CAGGTACGGCTGAAACACCGGAAGCTCCGGGAACAAGTGAATTCATGGTGGACATCTCCAAGATGCACA
 TGATCCTGTGCGACCTGCAGCTGGGTCTCAGCTCCTCGCACCGTCCCTGGAGAAGAGAATCGACGGTCT
 GGCAGGAAGCTGGATGCCCTGACAGAGCTGCTCGGCACTGCCCTGCAGCAACAGCAGCTACCGAACCC
 AGCCAGGAGGCCACA

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR206777 protein sequence
 Red=Cloning site Green=Tags(s)

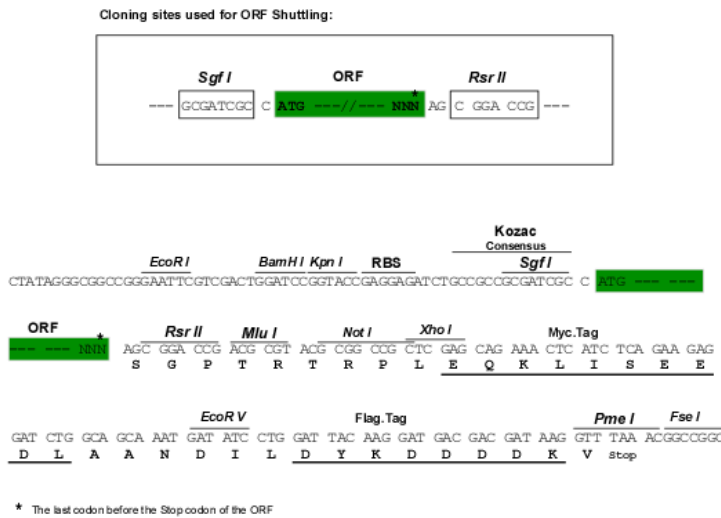
MGGELVTGLGALRRRKRLLEQEKRVAAGWLVLAGTGIGLMVLHAEMLWFLGCKWVLYLLLVKCLITLSTA
 FLLCLIVVFHAKEVQLFMTDNGLRDWRVALTRRQVAQILLELLVCGVHPVPLRSPHCALAGEATDAQWP
 GFLGEGEALLSLAMLLRLLYLVPRAVLLRSGVLLNASYRSIGALNQVFRHWFVAKLYMNHGPRLLGLT
 LGLWLTAWVLSVAERQAVNATGHLDTLWLIPTFLTIGYGDVVPGMTMWGKIVCLCTGVMGVCCTALLV
 AVVARKLEFNKAEKHVHNFMMDIHYAKEMKESAAARLLQEAWMYKHTRRKDSRAARRHQKMLAAIHTFR
 QVRLKHKRLREQVNSMVDISKMHMILCDLQLGLSSSHRALEKRIDGLAGKLDALTELLGTALQQQLPEP
 SQEAT

SGP**TRTRPLEQKLI**SEEDLAANDILDYKDDDDK**V**

Restriction Sites:

SgfI-RsrII

Cloning Scheme:



ACCN: NM_008433

ORF Size: 1278 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_008433.1](#), [NM_008433.2](#), [NM_008433.3](#), [NM_008433.4](#), [NP_032459.2](#)

RefSeq Size: 1956 bp

RefSeq ORF: 1278 bp

Locus ID: 16534

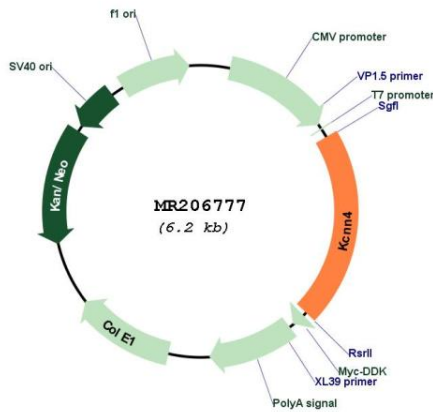
UniProt ID: [O89109](#)

Cytogenetics: 7 A3

MW: 47.8 kDa

Gene Summary: Forms a voltage-independent potassium channel that is activated by intracellular calcium (PubMed:9705284). Activation is followed by membrane hyperpolarization which promotes calcium influx. Required for maximal calcium influx and proliferation during the reactivation of naive T-cells (PubMed:20884616). Plays a role in the late stages of EGF-induced macropinocytosis (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206777