

Product datasheet for MR218587

Kcnh3 (NM_010601) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kcnh3 (NM_010601) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Kcnh3
Synonyms:	AU019351; C030044P22Rik; Elk; Elk2; Kv12.2; Melk; Melk2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR218587 representing NM_010601 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGCCGGCCATGCGGGGGCTCCTGGCGCCGAGAACACCTTCCTGGACACCATCGCCACCCGTTTCGACG
GGACGCACAGCAACTTCGTGCTGGGCAACGCCAGGTGGCGGGGCTCTTCCCTGTGGTCTACTGCTCCGA
TGGCTTCTGTGACCTCACGGGTTTCTCCAGAGCTGAGGTCATGCAGCGGGGCTGTGCTGCTCCTCCTC
TATGGCCAGACACCAGTGAGCTGGTCCGCAACAGATCCGAAAGGCCCTAGATGAGCACAAGAATTCA
AGGCTGAACTGATCCTGTACCGAAGAGTGGGCTTCCATTCTGGTGTCTCCTGGATGTGATACCTATAAA
AAATGAGAAGGGGAGGTGGCCCTTCTCCTGGTCTCTACAAGGACATCAGCGAGACCAAGAACCGAGGA
GGCCCTGACAACCTGGAAGGAGAGAGGCGGTGGCCGGCGCCGATATGGTCGGGCCGGATCCAAGGCTTCA
ATGCCAATCGGAGGCGGAGCCGGGCAGTTCTCTACCACCTCTCTGGCCATCTGCAGAAGCAACCCAAAGGG
CAAGCACAAGCTCAATAAGGGAGTGTGGGAGAGAAGCCAAATTTGCCTGAATATAAAGTCGCTGCTATC
CGGAAGTACCCTTTATCCTGCTGCACTGTGGGCTCTGAGAGCCACCTGGGATGGCTTCATCCTGCTTG
CCACACTCTACGTGGCAGTCACTGTGCCATACAGTGTGTGTGTGAGCACAGCACGGGAACCCAGTGTGC
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CGTACTACATTTGTGTTCAAGTCAAGCCAGGTCGATTTGCCCCAAAGTCCATTTGCCTCCACTACGTC
CCACCTGGTTCCCTGGATGTCATAGCAGCACTGCCCTTTGACCTACTACATGCCTTCAAGGTCAACGT
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CGGTACTCACAGTACAGCGCGTTGTGCTCACCTTGTCTCATGGCTGTCTTCGCCCTGCTCGCTCACTGGG
TGGCCTGCGTCTGGTTTTACATCGGCCAGCAAGAGATTGAGAGCAGCGAGTCGGAGCTGCTGAGATCGG
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GTACTTCGCGCTCAGCAGTCTACCAGTGTGGGCTTCGGCAACGTGTCCGCTAACACAGACAGGAGAAG



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ATCTTCTCCATCTGCACCATGCTTATCGGAGCTCTAATGCATGCAGTGGTGTGGGAATGTGACGGCCA
 TCATCCAGCGCATGTATGCTCGCCGCTTCTGTACCACAGCCGCACTCGTGACCTGCGAGACTACATCCG
 CATCCACCGCATCCCCAAACCCCTCAAACAACGAATGCTGGAGTACTTCCAAGCCACCTGGGCTGTGAAC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR218587 representing NM_010601
 Red=Cloning site Green=Tags(s)

MPAMRGLLAPQNTFLDTIATRFDGTHSNFVLGNAQVAGLFPVVYCSDFCDLTGFSRAEVMQRGCACSF
 YGPDTELVRQQIRKALDEHKEFKAELILYRKSGLPFWCLLDVPIKNEKGEVALFLVSHKDISETKNRG
 GPDNWKERGGRRRYGRAGSKGFNANRRRSRAVLYHL SGHLQKQPKGKHLNKGVFGEKPNLPEYKVA
 RKSPFILLHCGALRATWDGFILLATLYAVTVPYVSVSTAREPSAARGPPSVCDLAVEVLFILDIVLNF
 RTTFVSKSGQVVFAPKSI CLHYVTTWFLLDVIAALPFDLLHAFKVNYYVGAHLLKTVRLRLRLRLPR
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 NSSGQSENCSSSSSSSGSGGGRGSEANGTLELLGGPSLR SAYITSLYFALSSLTSVGFGNVSANTDTEK
 IFSICTMLIGALMHAVVFGNVTAIQRM YARRFLYHSRTRDLRDYIRIHRIPKPLKQRMLEYFQATWAVN
 NGIDTTELLQSLPDEL RADIAMHLHKEVLQLPLFEASRGCLRALSLALRPAFCTPGEYL IHQGDALQAL
 YFVCSGSMEVLKGGTVLAILGKGD LIGCELPQREQVVKANADV KGLTYCVLQCLQLAGLHESLALYEF
 A PRFSRGLRGELSYNLGAGGVSAEVD TSSLSGDNTLMSTLEEKETDGEQGH TVSPAPADEPSSPLLSPGCT
 SSSSAKLLSPRRTAPRRLGGRGRPSRAGVLKPEAGPSAHP RSLDGLQLPPMPWNVPPDLSPRVVDGIE
 DGCSSDQPKFSFRVQSGPECSSSPGTE SGLLTVPLGPSEARNTDLDKLRQAVMELSEQVLQ MREGL
 QSLRQAVQLILVQEGEQCP RGSSEPCPATASGLLQPLRVD TGASSYCLQPPAGSVLSGTWPHRPPGQP
 PPLMAPWPWGPASQSSPWPRATALWTSTSDSEPPGSGDL CSEPSTPASP PPSSEEGARTGTPAPV
 SQAEA TSTGEP PPPGGRALP WDPHSLEMV LIGCHGPGTVQWTQEETGV

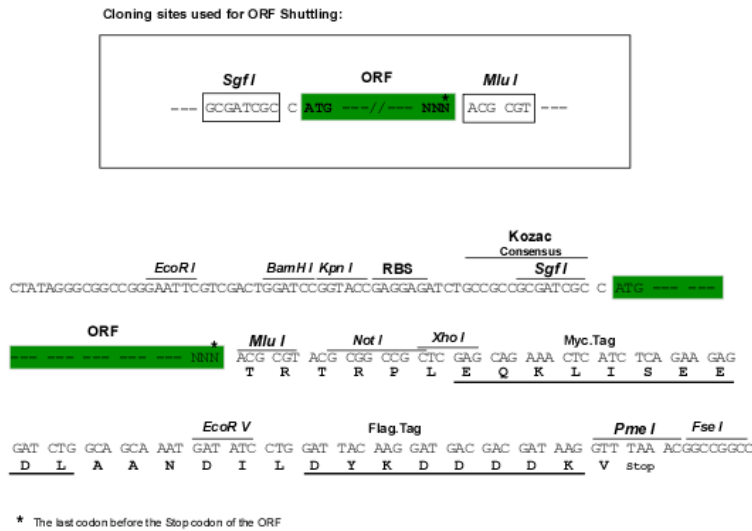
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9002_c04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_010601

ORF Size: 3285 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_010601.4](#)

RefSeq Size: 3583 bp

RefSeq ORF: 3288 bp

Locus ID: 16512

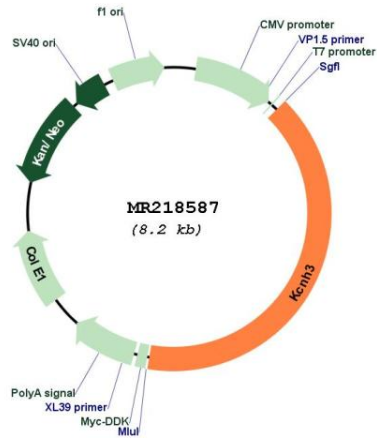
UniProt ID: [Q9WVJ0](#)

Cytogenetics: 15 F1

MW: 118.7 kDa

Gene Summary: The protein encoded by this gene is a voltage-gated potassium channel alpha subunit predominantly expressed in the forebrain. An increase in cognitive function was observed when this gene was knocked out, while deletion of the gene resulted in hippocampal hyperexcitability and epilepsy. [provided by RefSeq, Sep 2015]

Product images:



Circular map for MR218587