

Product datasheet for RC203627

KCNK13 (NM_022054) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNK13 (NM_022054) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNK13
Synonyms:	K2p13.1; THIK-1; THIK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203627 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGGCCGGGTTTCAGCTGGGGCCCGGGCCACCTGAACGAGGACAACGCGCCTTTCTGCTGCTGG
CCGCGCTCATCGTGTCTACCTGCTGGGCGGCCCGCGTCTTCTCCGCGCTGGAGCTGGCGCACGAGCG
CCAGGCCAAGCAGCGCTGGGAGGAGCGCTGGCCAACCTCAGCCGCGGCCACAACCTGAGCCGCGACGAG
CTGCGCGGCTTCTCCGCACTACGAGGAGGCCACTCGGGCCGGCATCCGCGTGGACAACGTCGCCCCG
GCTGGGACTTCACCGGCCTTCTACTTCTGTTGGCACCCTCGTTCCACCATAGGGTTTGGGATGACAAC
TCCGGCGACAGTAGGAGGAAAAATCTTTCTGATCTTTACGGCCTTGTGGGTGTCCAGCACCATCTTG
TTCTTCAACCTTCTCCTGGAGCGCTGATCACCATCATCGCTACATCATGAAGTCGTGCCACCAGCGGC
AGCTCCGGAGACGAGGGCCCTGCCCCAGGAGAGCCTGAAGGATGCGGGGAGTGTGAGGTGGACAGCCT
GGCCGGCTGGAAGCCCTCCGTGTACTACGTATGCTGATCCTATGCACAGCCTCCATCCTCATCTTTGC
TGCGCCTCAGCCATGTACACCCCATTTGAAGGCTGGAGCTACTTTGACTCACTCTACTTCTGTTTTGTGG
CTTTCAGCACCATTGGCTTTGGGGACCTGGTCAGCAGCCAGAACGCCACTATGAGAGCCAAGGCCTCTA
TCCTCATCAAACAGTCCTTGAAGTGGATCCTGAGGAAAATGGACAGCGGGTGTGCCCAATGCCAGA
GAGGACTCTTGGGATCAGCAGGAACGTGGTGTGATGCCAGGAGCGTCCGGAACCGCTGCAACATCTCCAT
AGAGACAGACGGGTGGCAGAGAGTGACACGGACGGGCGCGGCTCTCAGGGGAGATGATCTCCATGAAG
GACTTGTGGCAGCCAACAAGGCCTCGTTGGCCATCCTGCAGAAGCAACTGTCTGAGATGGCCAACGGCT
GCCCCACAGACCAGCACACTGGCCCGGACAATGAATTCTCAGGGGGGTGGGAGCCTTTGCAATCAT
GAACAACAGGTTGGCAGAGACCAGTGGGACAGG

ACGCGTACGCGGCCGCTCGAGCAGAAAATCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online >](#)

Protein Sequence: >RC203627 protein sequence
Red=Cloning site Green=Tags(s)

MAGRGFSWGPHLNEDNARFLLLAALIVLYLLGGAAVFSALELAHERQAKQRWEERLANFSRGNLSRDE
 LRGFLRHYYEATRAGIRVDNVRPRWDFTGAFYFVGTVVSTIGFGMTTPATVGGKIFLIFYGLVGCSSIL
 FFNLFLERLITIIAYIMKSCHQRQLRRRGALPQESLKDAGQCEVDSLAWKPSVYYVMLILCTASILISC
 CASAMYTPIEGWSYFDSL YFCVAFSTIGFGDLVSSQNAHYESQGLYRFANFVFILMGVCCIIYSLFNVIS
 ILIKQSLNWIILRKMDSGCCPQCQRGLLRSRNVVMPGSRVNRNCNISIETDGAESDTDGRRLSGEMISMK
 DLLAANKASLAILQKQLSEMANGCPHQTSTLARDFNEFSGGVGAFAIMNRLAETS GDR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6566_f07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_022054

ORF Size: 1224 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_022054.4](#)

RefSeq Size: 2587 bp

RefSeq ORF: 1227 bp

Locus ID: 56659

UniProt ID: [Q9HB14](#)

Cytogenetics: 14q32.11

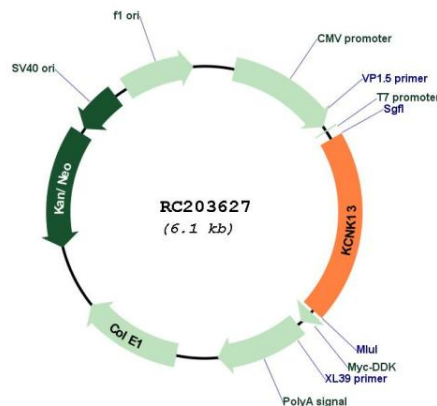
Domains: ion_trans

Protein Families: Druggable Genome, Ion Channels: Potassium, Transmembrane

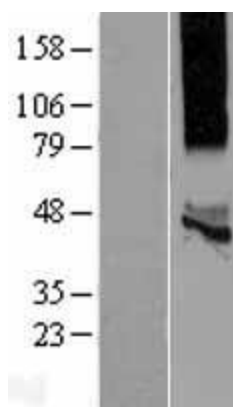
MW: 45.4 kDa

Gene Summary: Potassium channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. This gene encodes a potassium channel containing two pore-forming domains. This protein is an open channel that can be stimulated by arachidonic acid and inhibited by the anesthetic halothane. [provided by RefSeq, Jul 2013]

Product images:



Circular map for RC203627



Western blot validation of overexpression lysate (Cat# [LY411804]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203627 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).