

Product datasheet for **RC204457**

KCNN4 (NM_002250) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNN4 (NM_002250) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KCNN4
Synonyms:	DHS2; hIKCa1; hKCa4; hSK4; IK; IK1; IKCA1; KCa3.1; KCA4; SK4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC204457 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCGGGGATCTGGTCTTGGCTGGGGCCTTGAGACGCCGAAAGCGCTTGCTGGAGCAGGAGAAGT
 CTCTGGCCGGCTGGCACTGGTCTGGCAGGAAGTGGCATTGGACTCATGGTGTGCATGCAGAGATGCT
 GTGGTTCGGGGGTGCTCGTGGCGCTCTACCTGTTCTGGTTAAATGCACGATCAGATTTCCACCTTC
 TTA CTCTCTGCCTCATCGTGGCCTTTCATGCCAAAGAGGTCCAGCTGTTTCATGACCGACAACGGGCTGC
 GGGACTGGCGGTGGCGCTGACCGGGCGCAGGCGGCGCAGATCGTGTGGAGCTGGTGGTGTGGGGT
 GCACCCGGCGCCCGTGGGGGCCCGCTGCGTGCAGGATTTAGGGGCGCCGCTGACCTCCCGCAGCCC
 TGGCCGGGATTCCTGGGCAAGGGGAAGCGCTGCTGTCCCTGGCCATGCTGCTGCGTCTCTACCTGGTGC
 CCCGCGCGTGTCTCTGCGCAGCGGCTCTGCTCAACGCTTCTACCGCAGCATCGGCGCTCTCAATCA
 AGTCCGCTTCGCCACTGGTTCGTGGCCAAGCTTTACATGAACACGCACCCTGGCCGCTGCTGCTCGGC
 CTCACGCTTGGCCTCTGGCTGACCACCGCTGGGTGCTGTCCGTGGCCGAGAGGCAGGCTGTTAATGCCA
 CTGGGCACCTTTAGACACACTTTGGCTGATCCCCATCACATTCCTGACCATCGGCTATGGTGACGTGGT
 GCCGGGACCATGTGGGGCAAGATCGTCTGCCTGTGCACTGGAGTTCATGGGTGTCTGCTGCACAGCCCTG
 CTGGTGGCCGTGGTGGCCGGAAGCTGGAGTTTAAAGGAGGAGAGGAGCAGTGCACAACCTTCATGATGG
 ATATCCAGTATACCAAAGAGATGAAGGAGTCCGCTGCCGAGTGTACAAGAAGCCTGGATGTTCTACAA
 ACATACTCGCAGGAAGGAGTCTCATGCTGCCCGCAGGCATCAGCGCAAGCTGTGGCCGCATCAACGCG
 TTCGCCAGGTGCGGCTGAAACACCGGAAGCTCCGGGAACAAGTGAACCTCATGGTGGACATCTCCAAGA
 TGCACATGATCCTGTATGACCTGCAGCAGAATCTGAGCAGCTCACACCGGGCCCTGGAGAAACAGATTGA
 CACGCTGGCGGGGAAGCTGGATGCCCTGACTGAGCTGCTTAGCACTGCCCTGGGGCCGAGGCAGCTTCCA
 GAACCCAGCCAGCAGTCCAAG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTAA

Protein Sequence:

>RC204457 protein sequence
 Red=Cloning site Green=Tags(s)

MGGDLVGLGALRRRRLLEQEKSLAGWALVLAGTGIGLMVLHAEMLWFGGCSWALYLFLVKCTISISTF
 LLLCLIVAFHAKEVQLFMTDNGLRDWRVALTGRQAAQIVLELVVCGLHPAPVRGPPCVQDLGAPLTSPQP
 WPGFLGQGEALLSLAMLLRLLYLVPRAVLLRSGVLLNASYRSIGALNQVFRHWFVAKLYMNTHPGRLLG
 LTLGLWLTAWVLSVAERQAVNATGHLSDTLWLIPITFLTIGYGDVVPGMTMWGKIVCLCTGVMGVCCTAL
 LVAVVARKLEFNKAEKHVHNFMMDIQYTKEMKESAAARVLQEAWMFYKHTRRKESHAARRHQKLLAANA
 FRQVRLKHKRLREQVNSMVDISKMHMILYDLQQNLSSSHRALEKQIDTLAGKLDALTELLSTALGPRQLP
 EPSQQSK

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Chromatograms:

https://cdn.origene.com/chromatograms/mk6186_f07.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:


ACCN: NM_002250

ORF Size: 1281 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

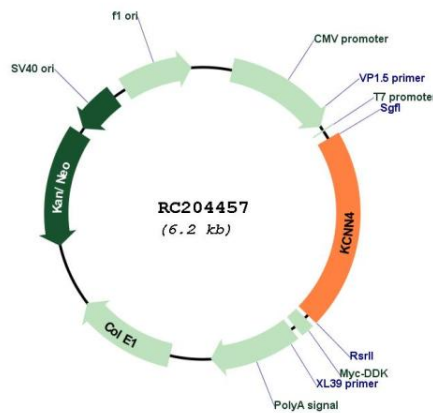
Reconstitution Method:

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.

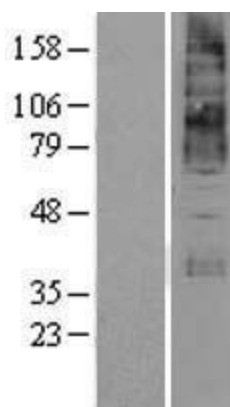
RefSeq: [NM_002250.3](#)

RefSeq Size:	2240 bp
RefSeq ORF:	1284 bp
Locus ID:	3783
UniProt ID:	O15554
Cytogenetics:	19q13.31
Domains:	SK_channel, CaMBD
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
MW:	47.7 kDa
Gene Summary:	The protein encoded by this gene is part of a potentially heterotetrameric voltage-independent potassium channel that is activated by intracellular calcium. Activation is followed by membrane hyperpolarization, which promotes calcium influx. The encoded protein may be part of the predominant calcium-activated potassium channel in T-lymphocytes. This gene is similar to other KCNN family potassium channel genes, but it differs enough to possibly be considered as part of a new subfamily. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC204457



Western blot validation of overexpression lysate (Cat# [LY400818]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204457 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).