

Product datasheet for **RG208350**

KCNN3 (NM_170782) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNN3 (NM_170782) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KCNN3
Synonyms:	hSK3; KCa2.3; SK3; SKCA3; ZLS3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG208350 representing NM_170782 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGAGACCTATAAAGGACTCCATGTTTTCGTTGGCCCTGAAATGCCTTATCAGTCTGTCCACCATCA
TCCTTTTGGGCTTGATCATCGCCTACCACACACGTGAAGTCCAGCTCTTCGTGATCGACAATGGCGCGGA
TGACTGGCGGATAGCCATGACCTACGAGCGCATCCTGTACATCAGCCTGGAGATGCTGGTGTGCGCCATC
CACCCATTCTGGCGAGTACAAGTTCTTCTGGACGGCAGCCTGGCCTTCTCTACACACCCCTCCCGGG
CGGAGGCCGATGTGGACATCATCTGTCTATCCCCATGTTCTCTGCGCCTGTACCTGATCGCCGAGTCAT
GCTGTGCACAGCAAGCTCTTACCAGATGCCTCGTCCCGCAGCATCGGGGCCCTCAACAAGATCAACTTC
AACACCCGCTTTGTATGAAGACGCTCATGACCATCTGCCTGGCACTGTGCTGCTCGTGTTCAGCATCT
CTCTGTGGATCATTGCTGCCTGGACCGTCCGTGTCTGTGAAAGGTACCATGACCAGCAGGACGTAAGTAG
TAACTTTCTGGGTGCCATGTGGCTCATCTCCATCACATTCCTTTCCATTGGTTATGGGGACATGGTGCC
CACACATACTGTGGAAAGGTGTCTGTCTCCTCACTGGCATCATGGGTGCAGGCTGCACTGCCCTTGTGG
TGGCCGTGGTGGCCGAAAGCTGGAACCTACCAAAGCGGAGAAGCACGTTTATAACTTATGATGGACAC
TCAGCTACCAAGCGGATCAAGAATGCTGCAGCCAATGTCCTTCGGGAAACATGGTTAATCTATAAACAC
ACAAAGCTGCTAAAGAAGATTGACCATGCCAAAGTGAGGAAACACCAGAGGAAGTTCTCCAAGCTATCC
ACCAGTTGAGGAGCGTCAAGATGGAACAGAGGAAGCTGAGTGACCAAGCCAACACTCTGGTGGACCTTTC
CAAGATGCAGAATGTCATGTATGACTTAATCACAGAACTCAATGACCGGAGCGAAGACCTGGAGAAGCAG
ATTGGCAGCCTGGAGTCGAAGCTGGAGCATCTCACCGCCAGCTTCAACTCCCTGCCGCTGCTCATCGCCG
ACACCCTGCGCCAGCAGCAGCAGCAGCTCTGTCTGCCATCATCGAGGCCCGGGGTGTCAGCGTGGCAGT
GGGCACCACCCACACCCCAATCTCCGATAGCCCCATTGGGGTCAGCTCCACCTCTTCCCGACCCCGTAC
ACAAGTTCAAGCAGTTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG208350 representing NM_170782
Red=Cloning site Green=Tags(s)

MERPIKDSMFLALKCLISLSTIILLGLIIAYHTREVQLFVIDNGADDWRIAMTYERILYISLEMLVCAI
 HPIPGYKFFWTARLAFSYTPSRAEADVDIILSIPMFLRLYL IARVMLLHSLKFTDASSRSIGALNKINF
 NTRFVMKTLMTICPGTVLLVFSISLWIIAAWTVRVYCERYHQDQDVTSNFLGAMWLISITFLSIGYDMVP
 HTYCGKGVCLLTGIMGAGCTALVVAVVARKLELTKAEKHVHNFMMDTQLTKRIKNAANVLRWLIYKH
 TKLLKKIDHAKVRKHQRKFLQAIHQLRSVKMEQRKLSAQANTLVDL SKMQNVMYDLITELNDRSEDLKQ
 IGSLESKLEHLTASFNSLPLLIADTLRQQQQQLLSAIIIEARGVSVAVGTTHTPISDSPIGVSSTSFPPTY
 TSSSSC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_170782

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_170782.3](#)

RefSeq Size: 1981 bp

RefSeq ORF: 1281 bp

Locus ID: 3782

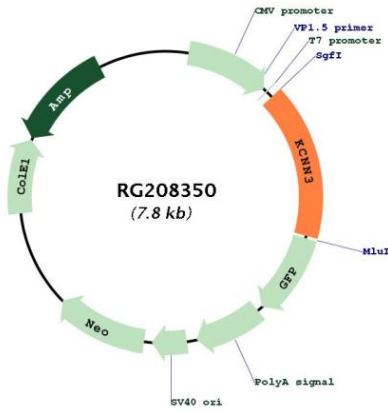
UniProt ID: [Q9UGI6](#)

Cytogenetics: 1q21.3

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

Gene Summary: Action potentials in vertebrate neurons are followed by an afterhyperpolarization (AHP) that may persist for several seconds and may have profound consequences for the firing pattern of the neuron. Each component of the AHP is kinetically distinct and is mediated by different calcium-activated potassium channels. This gene belongs to the KCNN family of potassium channels. It encodes an integral membrane protein that forms a voltage-independent calcium-activated channel, which is thought to regulate neuronal excitability by contributing to the slow component of synaptic AHP. This gene contains two CAG repeat regions in the coding sequence. It was thought that expansion of one or both of these repeats could lead to an increased susceptibility to schizophrenia or bipolar disorder, but studies indicate that this is probably not the case. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2011]

Product images:



Circular map for RG208350