

Product datasheet for **SC316623**

KCNK10 (NM_138318) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNK10 (NM_138318) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNK10
Synonyms:	K2p10.1; PPP1R97; TREK-2; TREK2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_138318, the custom clone sequence may differ by one or more nucleotides

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ATGGAGGATGGATTTAAGGGGGACAGGACTGAAGGCTGTCGCAGTGATTCAAGTGGCCGTTCCCGCAGCAG
CACCGGTGTGCCAGCCCAAGAGCGCCACTAACGGGCAACCCCGGCTCCGGCTCCGACTCCAACCTCCGCG
CCTGTCCATTTCTCCCGAGCCACAGTGGTAGCCAGGATGGAAGGCACCTCCCAAGGGGGCTTGACAGACC
GTCATGAAGTGGAGACGGTGGTTGCCATCTTTGTGGTTGGTGGTCTACCTTGTCACTGGCGGTCTTG
TCTTCCGGGCATTGGAGCAGCCCTTTGAGAGCAGCCAGAAGAATACCATCGCCTTGAGAGAAGGCGGAATT
CCTGCGGGATCATGTCTGTGTGAGCCCCAGGAGCTGGAGACGTTGATCCAGCATGCTCTTGATGCTGAC
AATGCGGGAGTCAGTCCAATAGGAACTCTTCCAACAACAGCAGCCACTGGGACCTCGGCAGTGCCTTTT
TCTTTGCTGGAAGTGCATTACGACCATAGGGTATGGGAATATTGCTCCGAGCACTGAAGGAGGCAAAAT
CTTTTGTATTTTATATGCCATCTTTGGAATCCACTCTTTGGTTTCTTATTGGCTGGAATTGGAGACCAA
CTTGAACCATCTTTGGGAAAAGCATTGCAAGAGTGGAGAAGGTCTTTGAAAAAAGCAAGTGAGTCAGA
CCAAGATCCGGGTCACTCAACCATCTGTTTCATCTTGGCCGGCTGCATTGTGTTTGTGACGATCCCTGC
TGCATCTTTAAGTACATCGAGGGCTGGACGGCCTTGGAGTCCATTTACTTTGTGGTGGTCACTCTGACC
ACGGTGGGCTTTGGTGATTTTGTGGCAGGGGAAACGCTGGCATCAATTATCGGGAGTGGTATAAGCCCC
TAGTGTGGTTTTGGATCCTTGTGGCCTTGCTACTTTGCAGCTGCTCCTCAGTATGATCGGAGATTGGCT
ACGGGTCTGTCCAAAAAGACAAAAGAAGAGGTGGGTGAAATCAAGGCCATGCGGCAGAGTGGAAAGGCC
AATGTCACGGCTGAGTTCGGGGAGACACGGCGAAGGCTCAGCGTGGAGATCCACGATAAGCTGCAGCGGG
CGGCCACCATCCGCAGCATGGAGCGCCGGCGCTGGGCCCTGGACCAGCGGGCCACTCACTGGACATGCT
GTCCCCCGAGAAGCGCTCTGTCTTTGCTGCCCTGGACACCGCCGCTTCAAGGCCTCATCCAGGAGAGC
ATCAACAACCGGCCAACCAACCTGCGCCTGAAGGGGCGGAGCAGTGAACAAGCATGGCAGGGTGCCT
CCGAGGACAACATCATCAACAAGTTCGGGTCCACTCCAGACTACCAAGAGGAAAAACAAGGACCTCAA
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AAAGAGGAGGAGACGAAAAAGATGTGTAACCTCAGACAACCTCCAGCACAGCCATGCTGACGGACTGTATCC
AGCAGCACGCTGAGTTGGAGAACGGAATGATACCCACGGACACCAAGACCGGGAGCCGGAGAACAACCT
ATTACTTGAAGACAGAACTAA
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_138318 unedited

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GTGCCTTGATACGACTCCTATAGGGCGCCGCGAATTCATGGAGGATGGATTTAAGGGG
GACAGGACTGAAGGCTGTCGCAGTGATTCAAGTGGCCGTTCCCGCAGCAGCACCGGTGTGC
CAGCCCAAGAGCGCCACTAACGGGCAACCCCGGCTCCGGCTCCGACTCCAACCTCCGCGC
CTGTCCATTTCTCCCGAGCCACAGTGGTAGCCAGGATGGAAGGCACCTCCCAAGGGGGC
TTGCAGACCGTCAAGTGGAGACGGTGGTTGCCATCTTTGTGGTTGGTGGTCTAC
CTTGTCACTGGCGTCTTGTCTTCCGGGCATTGGAGCAGCCCTTTGAGAGCAGCCAGAAG
AATACCATCGCCTTGAGAAAGGCGGAATTCCTGCGGGATCATGTCTGTGTGAGCCCCAG
GAGCTGGAGACGTTGATCCAGCATGCTCTTGATGCTGACAATGCGGGAGTCAGTCCAATA
GGAAACTCTTCCAACAACAGCAGCCACTGGGACCTCGGCAGTGCCTTTTTCTTTGCTGGA
ACTGTCATTACGACCATAGGGTATGGGAATATTGCTCCGAGCACTGAAGGAGGCAAAATC
TTTTGTATTTTATATGCCATCTTTGGAATCCACTCTTTGGTTTCTTATTGGCTGGAATT
GGAGACCAACTTGAACCATCTTTGGGAAAAGCATTGCAAGAGTGGAGAAGTCTTTGAA
AAAAGCAAGTGAAGTCAAGCAAGATCCCGGGTCACTCAACCATCTGTTTCATCTTGGCC
GGCTGCATTGTGTTTGTGACGATCCCTGCTGTCATCTTTAGTACATCGAGGGCTGACGCC
TTGAGTCCATTTACTTTGTGTGCTACTTGAACACGTGGGCTTTGTGATTTGTGACGGG
AACGCTGGCATCATTATCGGGAGTGGTATTAAGCCCCCTAGA
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_138318 unedited CGCTGATGCACCTTCAGGGCCGGAGAGGCACTGGGGAGGGGTCACAGGGATGCCACCCGGG ATCTGTTCCAGGAAACAGCTATGACCCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTT TTTTTTTTTTTTGACATTTCAAATCAGTTTATTGTCACCATTGCACCCACTGAGGAAAA TGCATGATTGGCCTTTAACCCAGCAGCAGTTGATGTCATGTTTTTACCCTGCTCGCCAG TTCATGTGGACTACCTACCCCTGTGAAAAAACCCTCAGCAGGCTTCTGTCATTGGT TAAGGTGATATCCACAGTGTGATGTTTGTGATTATTTTTTTTTCTTTTGCATGAAAAA AGCAATTGCACCTTTTCGTACGTGTGCTGATCTGCTTCCAACAAATTCCAGGTGCTCT CAGGTCCCCACAGACATTCATTTGGAGCATAAAAAAGACTAGGTATGATGCACTGAATGGT TGGTATCAAAATCAAGCTCAGAGCACATGCCAAAATGTCAACTCCAACGCTAGTTACAC ATAACCAGCTCCACCCAATCAGGTCCCCTTCTGTGTGTCACATATTACTACGACTCCA CTAAAAAGACACACCTGTTTCTTTCAGGAGGCTGGTCTAAGGAATAGCTGCCCTTGTCTA CGTGTGTGCCAGGTAGCACTGCCAGGGGTACAGCACTGCCACTGAAATGCCCTTAACA TGTACGCCAGAACCGCTACGTGCACGGACTCTGGTGTGCTGCGTTTGCTATCTGA AATGAAGTTCTTGTCTCTGATCCTTTGCAGAGCAGCTTTCAGTGTGATGGCACAGTGAAA TATATTCTCATGCTATGTATTGACTAAAAGTCTGTTTAGCACATGTCTCATGTGAATATT AAAACAC
Restriction Sites:	Please inquire
ACCN:	NM_138318
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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_138318.1 , NP_612191.1
RefSeq Size:	2401 bp
RefSeq ORF:	1632 bp
Locus ID:	54207
UniProt ID:	P57789
Cytogenetics:	14q31.3

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

Gene Summary: The protein encoded by this gene belongs to the family of potassium channel proteins containing two pore-forming P domains. This channel is an open rectifier which primarily passes outward current under physiological K⁺ concentrations, and is stimulated strongly by arachidonic acid and to a lesser degree by membrane stretching, intracellular acidification, and general anaesthetics. Several alternatively spliced transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Sep 2008]
Transcript Variant: This variant (3, also known as TREK2 splice variant b) has a different 5' terminal exon compared to transcript variant 1, and encodes a slightly longer isoform (3) with a distinct N-terminus compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.