

Product datasheet for **SC303492**

KCNQ3 (NM_004519) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KCNQ3 (NM_004519) Human Untagged Clone
Tag:	Tag Free
Symbol:	KCNQ3
Synonyms:	BFNC2; EBN2; KV7.3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

>OriGene sequence for NM_004519 edited
 GCGGATCATGGCATTGGAGTTCCCGGGCTTGCAGCCGCCGCCCGCCTCGTTCACGCAC
 CCCGAGCGCCCTTCTTCCCAGAGCAGCAGCGGAGAAGGCGAAGCGGCCGGCGGGGGCGA
 GGCAGATGGGGCTCAAGGCGCGCAGGGCGGGGGCGGCTGGCGGGCGCGGCACGGGG
 GCGGGGAGGGCGGGCGGGCGGCTAACCCAGCCGGAGGGGACGCGGGCGGCCCGCGACG
 AGGAGCGGAAAGTGGGGCTGGCGCCCGCGACGTGGAGCAAGTACCTTGGCGCTCGGG
 CCGGAGCCGACAAGACGGGACCTGCTGCTGGAGGGCGGGCGCGACGAGGGGCGACG
 GGAGGACCCCGCAGGGCATCGGGCTCCTGGCCAAGACCCCGCTGAGCCGCCAGTCAAGA
 GAAACAACGCAAGTACGGCGCATCCAACTTTGATCTACGACGCCCTGGAGAGACCGC
 GGGGCTGGGCGTGTCTTACCACGCGTTGGTGTCTGATTGTCTGGGGTGTCTGATT
 TGGCTGTCTGACCACATTAAGGAGTATGAGACTGTCTCGGGAGACTGGCTTCTGTTAC
 TGGAGACATTTGCTATTTTCATCTTTGGAGCCGAGTTTGTCTTGGAGATCTGGGCTGTG
 GATGTTGTGCCGATACAAAGGCTGGCGGGGCGACTGAAGTTTGCAGGAAGCCCTGT
 GCATGTTGGACATCTTTGTGCTGATTGCCTCTGTGCCAGTGGTTGCTGTGGAAACCAAG
 GCAATGTTCTGGCCACCTCCCTGCGAAGCTGCGCTTCTGCAGATCCTGCGCATGCTGC
 GGATGGACCGGAGAGGTGGCACCTGGAAGCTTCTGGGCTCAGCCATCTGTGCCACAGCA
 AAGAACTCATCACGGCCTGGTACATCGGTTTCTGACACTCATCTTTCTTATTCTTG
 TCTACCTGGTTGAGAAAGACGTCCCAGAGGTGGATGCACAAGGAGAGGAGATGAAAGAGG
 AGTTTGAGACCTATGCAGATGCCCTGTGGTGGGGCCTGATCACACTGGCCACCATTGGCT
 ATGGAGACAAGACACCCAAAACGTGGGAAGGCCGTCTGATTGCCGCCACCTTTTCCTTAA
 TTGGCGTCTCCTTTTTGCCCTTCCAGCGGGCATCCTGGGGTCCGGGCTGGCCCTCAAGG
 TGCAGGAGCAACACCGTCAAGACACTTTGAGAAAAGGAGGAAGCCAGCTGCTGAGCTCA
 TTCAGGCTGCTGGAGGTATTATGCTACCAACCCCAACAGGATTGACCTGGTGGCGACAT
 GGAGATTTTATGAATCAGTCGTCTTTTTCTTTCTTTCAGGAAAGAACAGCTGGAGGAG
 CATCCAGCCAAAAGCTGGGTCTCTTGGATCGGGTTCGCCTTTCTAATCCTCGTGGTAGCA
 ATACTAAAGGAAAGCTATTTACCCTCTGAATGTAGATGCCATAGAAGAAAGTCTTCTA
 AAGAACCAAGCCTGTTGGCTTAAACAATAAAGAGCGTTTCCGCACGGCCTTCCGCATGA
 AAGCCTACGCTTCTGGCAGAGTCTGAAGATGCCGGACAGGTGACCCCATGGCGGAAG
 ACAGGGGCTATGGGAATGACTTCCCATCGAAGACATGATCCCCACCTGAAGGCCGCCA
 TCCGAGCCGTGAGAATTCTACAATTCGTCTCTATAAAAAAAAAATTCAAGGAGACTTTGA
 GGCCTTACGATGTGAAGGATGTGATTGAGCAGTATTCTGCCGGGCATCTCGACATGCTTT
 CCAGGATAAAGTACCTTCAGACGAGAATAGATATGATTTTACCCTGGACCTCCCTCCA
 CGCCAAAACACAAGAAGTCTCAGAAAGGGTCAGCATTACCTTCCCATCCAGCAATCTC
 CCAGGAATGAACCATATGTAGCCAGACCATCCACATCAGAAATCGAAGACCAAAGCATGA
 TGGGGAAGTTTGTAAAAGTTGAAAGACAGGTTCCAGGACATGGGGAAGAAGCTGGACTTCC
 TCGTGGATATGCACATGCAACACATGGAACGGTTGCAGGTGCAGGTACGGAGTATTACC
 CAACCAAGGGCACCTCCTCGCCAGCTGAAGCAGAGAAGAAGGAGGACAACAGGTATTCCG
 ATTTGAAAACCATCATCTGCAACTATTCTGAGACAGGCCCCCGGAACCCCTACAGCT
 TCCACCAGGTGACCATTGACAAAGTCAGCCCCTATGGGTTTTTTGCACATGACCTGTGA
 ACCTGCCCGAGGGGACCCAGTTCTGGAAAGGTTCAAGGCAACTCCTCCTCCTCAGCAA
 CAACGTATGTGGAGAGGCCACGGTCTGCCTATCTTGACTCTTCTCGACTCCCGAGTGA
 GCTGCCACTCCCAGGCTGACCTGCAGGGCCCTACTCGGACCGAATCTCCCCGGCAGA
 GACGTAGCATCACGCGAGACAGTGACACACCTCTGTCCCTGATGTCGGTCAACCACGAGG
 AGCTGGAGAGGTCTCAAGTGGCTTCCAGCATCTCCAGGACAGAGATGATTATGTGTTCCG
 GCCCAATGGGGGTCGAGCTGGATGAGGGAGAAGCGGTACCTCGCCGAGGGTGAGACGG
 ACACAGACACGGACCCCTCACGCCAGCGGCTCCATGCCTCTGTCTCCACAGGGGATG
 GGATTTCTGATTAGTATGGACCCCTTCAATAAGCCATTTAAAAGAGGTCACTGGCTG
 ACCCTCCTTGTAAATGTAGACAGACTTTGTATAGTTCACTTACTTTACACCCGACGCTT
 ACCAGCGGGGACCAATGGCTGCATCAAATGCATGCGTGTGCGTGGTGGCCCCACCCAG
 GCAGGGGCTTCCACAGCCTTCTCCTCCCATGTCAACCAACAAAGTGCTTCTTTTCA
 GCATGGTTGCATGACTTACACTATATAAATGGTTCCGCTAATCTTCTTAGGATAAAA

Restriction Sites:	Please inquire
ACCN:	NM_004519
Insert Size:	3000 bp
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:	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
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_004519.2 , NP_004510.1
RefSeq Size:	3097 bp
RefSeq ORF:	2619 bp
Locus ID:	3786
UniProt ID:	O43525
Cytogenetics:	8q24.22
Protein Families:	Druggable Genome, Ion Channels: Potassium, Transmembrane
Gene Summary:	<p>This gene encodes a protein that functions in the regulation of neuronal excitability. The encoded protein forms an M-channel by associating with the products of the related KCNQ2 or KCNQ5 genes, which both encode integral membrane proteins. M-channel currents are inhibited by M1 muscarinic acetylcholine receptors and are activated by retigabine, a novel anti-convulsant drug. Defects in this gene are a cause of benign familial neonatal convulsions type 2 (BFNC2), also known as epilepsy, benign neonatal type 2 (EBN2). Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, May 2014]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). The 5' extent of this variant is inferred based on orthologous alignments.</p> <p>Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>