

## Product datasheet for **RG202199**

### **KCNS3 (NM\_002252) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	KCNS3 (NM_002252) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KCNS3
Synonyms:	KV9.3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG202199 representing NM\_002252  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGTGTTTGGTGAAGTTTTTCCATCGCCCTGGACAAGACGAGGAAGTTGTCAACCTGAATGTGGGGGCT  
 TTAAGCAGTATGTTGACCAAGCACCTCTCGGTTTTCTCACACCAGACTGGGAAGCTGCTTACTTG  
 CCATTCTGAAGAGGCCATTCTGGAGCTGTGTGATGATTACAGTGTGGCCGATAAGGAATACTACTTTGAT  
 CGGAATCCCTCTTGTTCAGATATGTTTTGAATTTTTATTACACGGGAAGCTGCATGCATGGAGGAGC  
 TGTGCGTATTCTCATTCTGCCAGGAGATCGAGTACTGGGCATCAACGAGCTCTTCATTGATTCTTGCTG  
 CAGCAATCGCTACCAGGAACGCAAGGAGGAAAACCACGAGAAGGACTGGGACCAGAAAAGCCATGATGTG  
 AGTACCGACTCCTCGTTGAAGAGTCGTCTCTGTTTGAGAAAGAGCTGGAGAAGTTGACACACTGCGAT  
 TTGGTCAGCTCCGAAGAAAATCTGGATTAGAATGGAGAATCCAGCGTACTGCCTGTCCGCTAAGCTTAT  
 CGCTATCTCCTCCTTGAAGAGTGGTCTGGCCTCCATCGTGCCATGTGCGTTACACAGCATGTCGGAGTTC  
 CAGAATGAGGATGGAGAAGTGGATGATCCGGTCTGGAAGGAGTGGAGATCGCGTGCATTGCCTGGTTCA  
 CCGGGGAGCTTGGCGTCCGGCTGGCTGCCGCTCCTTGTCAAAAAGAAATTCTGAAAAACCTCTGAACAT  
 CATTGACTTTGTCTCTATTATCCCTTCTATGCCACGTTGGCTGTAGACACCAAGGAGGAAGAGAGTGAG  
 GATATTGAGAACATGGGCAAGGTGGTCCAGATCTACGGCTTATGAGGATTTTCCGAATTTAAAGCTTG  
 CCCGGCACTCGGTAGGACTTCGGTCTCTAGGTGCCACACTGAGACACAGTACCATGAAGTTGGGCTTCT  
 GCTTCTCTCTCTGTGGCATTTCATTTCTCTGTGCTTATCTACTCCGTGGAGAAAGATGACCAC  
 ACATCCAGCCTCACCAGCATCCCATCTGCTGGTGGGCCACCATCAGCATGACAACCTGTGGGCTATG  
 GAGACACCCACCGGTCACCTTGGCGGAAAGCTCATCGCCAGCACATGCATCATCTGTGGCATCTTGGT  
 GGTGGCCCTTCCATCACCATCATCTTCAACAAGTTTTTCCAAATACTACCAGAAGCAAAGGACATTGAT  
 GTGGACAGTGCAGTGAAGATGCACCAGAGAAGTGCATGAGCTACCTTACTTTAACATTAGGGATATAT  
 ATGCACAGCGGATGCACGCCTTATTACCAGTCTCTCTCTGTAGGCATTGTGGTGAAGCATCTGACTC  
 CACAGATGCTTCAAGCATTGAAGACAATGAGGACATTTGTAACACCACCTCCTTGGAGAATTGCACAGCA  
 AAA

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

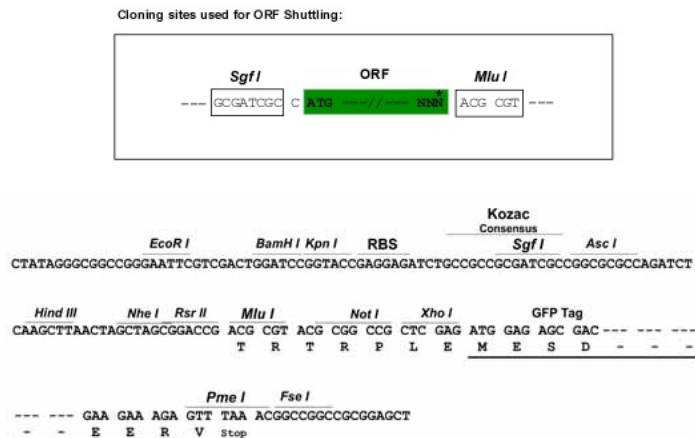
>RG202199 representing NM\_002252  
 Red=Cloning site Green=Tags(s)

MVFGFFHRPGQDEELVNLNVGGFKQYVDQSTLLRFPHTRLGKLLTCHSEEAILEL CDDYSVADKEYYFD  
 RNPSLFRYVLFNYTGLHVMEELCVFSFCQEIYWGINELFIDSCSNRYQERKEENHEKDWDQKSHDV  
 STDSSFEESSLFEKELEKFDLRFGLRKKIWRMENPAYCLSAKLIAISSLSVVLASIVAMCVHSMSEF  
 QNEDGEVDDPVLEGVEIACIAWFTGELAVRLAAAPCQKFWKNPLNIIDFVSIIPFYATLAVDTKEESE  
 DIENMGKVQILRLMRIFRILKLARHSVGLRSLGATLRHSYHEVGLLLLLFLSVGISIFSVLIIYSVEKDDH  
 TSSLTSIPICWWTISM TTVGYGDTHPVTLAGKLIASCTIICGILVVALPITIIIFNKFSKYYQKQKDID  
 VDQCSEDAPEKHELPHYFNIRDIYAQRMHAFITSLSSVGI VVSDPDSTDASSIEDNEDICNTTSLNCTA  
 K

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_002252

**ORF Size:** 1473 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\\_002252.2](#)

**RefSeq Size:** 2344 bp

**RefSeq ORF:** 1476 bp

**Locus ID:** 3790

**UniProt ID:** [Q9BQ31](#)

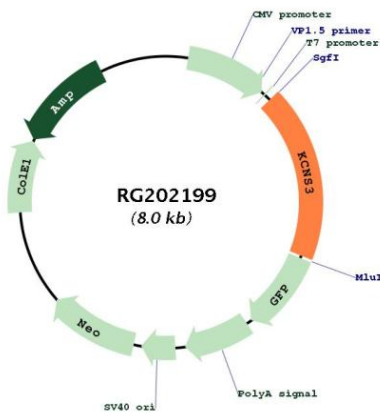
**Cytogenetics:** 2p24.2

**Domains:** BTB, K\_tetra, ion\_trans

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

**Gene Summary:** Voltage-gated potassium channels form the largest and most diversified class of ion channels and are present in both excitable and nonexcitable cells. Their main functions are associated with the regulation of the resting membrane potential and the control of the shape and frequency of action potentials. The alpha subunits are of 2 types: those that are functional by themselves and those that are electrically silent but capable of modulating the activity of specific functional alpha subunits. The protein encoded by this gene is not functional by itself but can form heteromultimers with member 1 and with member 2 (and possibly other members) of the Shab-related subfamily of potassium voltage-gated channel proteins. This gene belongs to the S subfamily of the potassium channel family. Alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Sep 2013]

**Product images:**



Circular map for RG202199