

## Product datasheet for **SC331490**

### **KCNN3 (NM\_001204087) Human Untagged Clone**

#### **Product data:**

|               |   |
|---------------|---|
| Product Type: | Expression Plasmids                       |
| Product Name: | KCNN3 (NM_001204087) Human Untagged Clone |
| Tag:          | Tag Free                                  |
| Symbol:       | KCNN3                                     |
| Synonyms:     | hSK3; KCa2.3; SK3; SKCA3; ZLS3            |
| Vector:       | pCMV6-Entry (PS100001)                    |



[View online »](#)

**Fully Sequenced ORF:** >SC331490 representing NM\_001204087.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

```

ATGGACACTTCTGGGCACTTCCATGACTCGGGGTGGGGACTTGGATGAAGACCCCAAGTGCCCTGT
CCATCCTCTGGGGATGAGCAGCAGCAGCAGCAGCAGCAACAGCAGCAGCAGCCACCACCGCCAGCG
CCACCAGCAGCCCCCAGCAGCCCCTGGGACCCCTCGCTGCAGCCTCAGCCTCCGCAGCTTCAGCAGCAG
CAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCCACCGCATCCCCTGTCTCAGCTCGCCAACTCCAG
AGCCAGCCCGTCCACCCTGGCCTGCTGCACTCCTCTCCCACCGCTTTCAGGGCCCCCCTTCGTCCAAC
TCCACCGCCATCCTCCACCCTTCTCCAGGCAAGGCAGCCAGCTCAATCTCAATGACCACTTGCTTGGC
CACTCTCCAAGTTCACAGCTACAAGTGGGCTGGCGGAGGCAGCCGGCACCGACAGGCCAGCCCCCTG
GTGACCCGGCGGGACAGCAACCCTTACGGAGATCGCCATGAGCTCCTGCAAGTATAGCGGTGGGGTC
ATGAAGCCCTCAGCCGCTCAGCGCTCCCGGAGGAACCTCATCGAGGCCGAGACTGAGGGCCAACCC
CTCCAGCTTTTCAGCCCTAGCAACCCCCGGAGATCGTCATCTCTCCCGGAGGACAACCATGCCAC
CAGACCCTGCTCCATCACCTAATGCCACCACAACCACCAGCATGCCGGCACCACCGCCAGCAGCACC
ACCTTCCCAAAGCCAACAAGCGGAAAAACAAAACATTGGCTATAAGCTGGGACACAGGAGGGCCCTG
TTTGAAAAGAGAAAGCGACTGAGTGACTATGCTCTGATTTTGGGATGTTTGGAAATTGTTGTATGGTG
ATAGAGACCGAGCTCTCTTGGGGTTTGTACTCAAAGACTCCATGTTTTCTGGTGGCCCTGAAATGCCTT
ATCAGTCTGTCCACCATCATCTTTGGGCTTGATCATCGCTACCACACACGTGAAGTCCAGCTTTC
GTGATCGACAATGGCGGGATGACTGGCGGATAGCCATGACCTACGAGCGCATCCTGTACATCAGCCTG
GAGATGCTGGTGTGCGCCATCCACCCATTCTGGCGAGTACAAGTTCTTCTGGACGGCAGCAGCCTGGCC
TTCTCTACACACCCTCCCGGGCGGAGGCCGATGTGGACATCATCCTGTCTATCCCCATGTTCTCTGCGC
CTGTACCTGATCGCCGAGTCACTGCTGTCACAGCAAGCTTTCACCGATGCCTCGTCCCGCAGCATC
GGGGCCCTCAACAAGATCAACTTCAACACCCGCTTGTGTCATGAAGACGCTCATGACCATCTGCCCTGGC
ACTGTGCTGCTCGTGTTCAGCATCTCTGTGGATCATTGCTGCCTGGACCGTCCGTGTCTGTGAAAGT
CCTGAATCACCAGCCAGCCTTCTGGCTCATCACTTCTGCTTGGTACCATGACCAGCAGGACGTAAC
AGTAACTTTCTGGGTGCCATGTGGCTCATCTCCATCACATTCTTTCCATTGGTTATGGGACATGGTG
CCCCACATACTGTGGGAAAGGTGTGTCTCTCTCACTGGCATCATGGGTGCAGGCTGCACTGCCCTT
GTGGTGGCCGTGGTGGCCGAAAGCTGGAACACCAAAGCGGAGAAGCACGTTCCATAACTTCATGATG
GACACTCAGCTCACCAAGCGGATCAAGAATGCTGCAGCCAATGTCCTTCGGGAAACATGGTTAATCTAT
AAACACACAAAGCTGCTAAAGAAGATTGACCATGCCAAAGTGAGGAAACACCAGAGGAAGTTCCTCAA
GCTATCCACCAGTTGAGGAGCGTCAAGATGGAACAGAGGAAGCTGAGTGACCAAGCCAACACTCTGGTG
GACCTTTCCAAGATGCAGAATGTATGACTTAATCACAGAACTCAATGACCCGAGGGAAGACCTG
GAGAAGCAGATTGGCAGCCTGGAGTCAAGCTGGAGCATCTCACCGCCAGCTTCAACTCCCTGCCGCTG
CTCATCGCCGACACCCTGCGCCAGCAGCAGCAGCAGCTCCTGTCTGCCATCATCGAGGCCCGGGGTGTC
AGCGTGGCAGTGGGCACCACCCACCCCAATCTCCGATAGCCCCATTGGGGTCAGCTCCACCTCCTTC
CCGACCCCGTACACAAGTTCAAGCAGTTGCTAA
  
```

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_001204087

**Insert Size:** 2241 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).

**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\\_001204087.1](#)

**RefSeq Size:** 13080 bp

**RefSeq ORF:** 2241 bp

**Locus ID:** 3782

**UniProt ID:** [Q9UGI6](#)

**Cytogenetics:** 1q21.3

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

**MW:** 82.8 kDa

**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]

Transcript Variant: This variant (3) has an additional in-frame coding exon compared to variant 1, resulting in a longer isoform (c, also known as SK3-ex4) containing a 15 aa protein segment that is not found in isoform a. This variant does not have independent transcript support; it was based on a publication (PMID:14978258) that reports that this variant is widely expressed in different tissues, and the encoded isoform is active, but exhibits different pharmacological properties compared to isoform a. 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 and the sequence (of the novel exon) reported in PMID:14978258.