

## Product datasheet for **MC228023**

### **Sgk3 (NM\_177547) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Sgk3 (NM_177547) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Sgk3
Synonyms:	2510015P22Rik; A330005P07Rik; Cisk; fy; fz
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >MC228023 representing NM\_177547  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCAGAGGGATTGTATCATGGACTACAAGGAGAGCTGCCAAGTGAAGCATTCCAGCTCTGACGAAC  
 ACAGAGAGAAAAAGAAGAGGTTACGGTTTATAAAGTTCTGGTCTCTGTGGGCAGAAGCGAGTGGTTTGT  
 CTTCAGGAGATACGCAGAGTTTGACAACTTTACAATTCTTTAAAGAAGCAGTTTCCTGCTATGGCTCTG  
 AAGATTCCTGCCAAGAGAATATTTGGTGATAATTTTGATCCAGATTTTATAAACAAAGAAGAGCAGGAT  
 TGAATGAGTTCATTACAGAACTTGGTCAGATATCCAGAGCTTTACAACCATCCAGATGTCCGAGCATTCT  
 TCAATGGACAGCCCAAGACATCAGTCAGATCCATCTGAAGATGAGGATGAAAGAAGTACTTCGAAGCCA  
 CATTCTACCTCACGGAACATCAACCTGGGACCACTGAAATCCTCATGCTAAACCACTGACTTCGATT  
 TTTTAAAAGTTATTGAAAGGGCAGCTTTGGCAAGTTCTTCTTGCAAAACGAAACTGGATGGAAAATT  
 TTATGCTGTCAAAGTGTACAGAAAAAATAGTTCTCAACAGAAAAGAGCAAAAACATATTATGGCTGAA  
 CGCAATGTGCTCTTGAAAATGTGAAGCACCCATTTTGGTTGGATTGCACTATTCTTCCAAACAACCTG  
 AAAAGCTTTATTTGTTCTGGATTTTGTAAATGGAGGGGAGCTCTTCTTTCACCTCCAAAGGAAAAGGTC  
 TTTTCTGAACCCAGAGCGAGGTTTTATGCCGCGGAGATCGCCAGTGCCTTGGGCTACCTGCACTCCATC  
 AAAATAGTGTACAGAGACTTGAAGCCAGAAAATATTCTTTTGGATTCAATGGGACATGTTGTCTTAACGG  
 ATTTTGGACTTTGCAAAGAAGGAATCGCTATTTCTGATACCACCACAACCTTTTGTGGTACACCAGAGTA  
 CCTTGCACCTGAAGTAATCAGAAAACAGCCCTATGACAACACTGTGGACTGGTGGTGCCTGGGCGCTGTT  
 CTGTATGAGATGCTGTACGGGCTGCCTCCTTTTACTGCCGAGATGTTGCTGAAATGTATGACAATATTC  
 TTCACAAGCCCTTAAACTTGAGACCAGGAGTGAGTCTCACCGCCTGGTCCATTCTGGAAGAACTTCTAGA  
 AAAAAACAGACAAAATCGACTTGGTGCCAAAGAAGACTTTCTTGAATCCAGAATCATCCTTTTTTTGAG  
 TCACTCAGCTGGACTGACCTCGTACAAAAAAGATTCCACCTCCATTTAACCCCTAATGTGCTGGACCAG  
 ATGATATCAGAACTTTGATGCCGTCTTCACTGAAGAAACGGTCCCTATTCAAGTGTGTGTCTTCTGA  
 CTATTCATCGTGAATGCCAGTGTCTGGAGGCAGATGATGCATTTGTTGGTTTTTCTTACGCCCTCT  
 TCGGAAGACTTATTTTGTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_177547
- Insert Size:** 1491 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:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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\\_177547.3](#), [NP\\_808215.2](#)

**RefSeq Size:** 5410 bp

**RefSeq ORF:** 1491 bp

**Locus ID:** 170755

**UniProt ID:** [Q9ERE3](#)

**Cytogenetics:** 1 2.08 cM

**Gene Summary:** Serine/threonine-protein kinase which is involved in the regulation of a wide variety of ion channels, membrane transporters, cell growth, proliferation, survival and migration. Up-regulates Na(+) channels: SCNN1A/ENAC and SCN5A, K(+) channels: KCNA3/KV1.3, KCNE1, KCNQ1 and KCNH2/HERG, epithelial Ca(2+) channels: TRPV5 and TRPV6, chloride channel: BSND, creatine transporter: SLC6A8, Na(+)/dicarboxylate cotransporter: SLC13A2/NADC1, Na(+)-dependent phosphate cotransporter: SLC34A2/NAPI-2B, amino acid transporters: SLC1A5/ASCT2 and SLC6A19, glutamate transporters: SLC1A3/EAAT1, SLC1A6/EAAT4 and SLC1A7/EAAT5, glutamate receptors: GRIA1/GLUR1 and GRIK2/GLUR6, Na(+)/H(+) exchanger: SLC9A3/NHE3, and the Na(+)/K(+) ATPase. Plays a role in the regulation of renal tubular phosphate transport and bone density. Phosphorylates NEDD4L and GSK3B. Positively regulates ER transcription activity through phosphorylation of FLII. Negatively regulates the function of ITCH/AIP4 via its phosphorylation and thereby prevents CXCR4 from being efficiently sorted to lysosomes.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1, 2 and 3 encode the same protein.