

Product datasheet for **MR206839**

Sgk3 (BC018363) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sgk3 (BC018363) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sgk3
Synonyms:	2510015P22Rik; A330005P07Rik; Cisk; fy; fz
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR206839 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTCTGAAGATTCCTGCCAAGAGAATATTTGGTGATAATTTTGTATCCAGATTTTATTAACAAGAA
 GAGCAGGATTGAATGAGTTCATTTCAGAAGCTTGGTCAGATATCCAGAGCTTTACAACCATCCAGATGTCCG
 AGCATTCTTCAAATGGACAGCCCAAGACATCAGTCAGATCCATCTGAAGATGAGGATGAAAAGAAGTACT
 TCGAAGCCACATTCTACCTCACGGAACATCAACCTGGGACCAACTGGAATCCTCATGCTAAACCAACTG
 ACTTCGATTTTTTAAAAGTTATTGGAAAGGGCAGCTTTGGCAAGTTCTTCTTGCAAAACGGAACTGGA
 TGGAAAATTTTATGCTGTCAAAGTGTACAGAAAAAATAGTTCTCAACAGAAAAGAGCAAAAACATATT
 ATGGCTGAACGCAATGTGCTCTGAAAAATGTGAAGCACCCATTTTGGTTGGATTGCACATTTCTTTCC
 AAACAACCTGAAAAGCTTTATTTTGTCTGGATTTTGTAAATGGAGGGGAGCTCTTCTTCCACCTCCAAG
 GAAAAGGTCTTTTCTGAACCCAGAGCGAGTTTTATGCCGCGGAGATCGCCAGTGCCTTGGGCTACCTG
 CACTCCATCAAAATAGTGTACAGAGACTTGAAGCCAGAAAATATTTCTTTTGGATTCAATGGGACATGTTG
 TCTTAACGGATTTTGGACTTTGCAAAGAAGGAATCGCTATTTCTGATACCACCACAACCTTTTGTGGTAC
 ACCAGAGTACCTTGACCTGAAGTAATCAGAAAACAGCCCTATGACAACACTGTGGACTGGTGGTGCCTG
 GGCGCTGTTCTGTATGAGATGCTGTACGGGCTGCCTCCTTTTTACTGCCGAGATGTTGCTGAAATGTATG
 ACAATATTTCTTACAAGCCCTTAAACTTGAGACCAGGAGTGAGTCTCACCGCCTGGTCCATTCTGGAAGA
 ACTTCTAGAAAAAACAGACAAAATCGACTTGGTGCCAAAAGAAGACTTTCTTGAATCCAGAATCATCCT
 TTTTTTGAGTCACTCAGCTGGACTGACCTCGTACAAAAAAGATTCCACCTCCATTTAACCTAATGTGG
 CTGGACCAGATGATATCAGAACTTTGATGCCGTCTTCACTGAAGAAACGGTTCCCTATTCAGTGTGTGT
 GTCTTCTGACTATTCCATCGTGAATGCCAGTGTCTGGAGGCAGATGATCATTTGTTGGTTTTTCTTAC
 GCCCTCCTTCGGAAGACTTATTTTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR206839 protein sequence
 Red=Cloning site Green=Tags(s)

MALKIPAKRIFGDNFDPDFIKQRRAGLNEFIQNLVRYPELYNHPDVRAFLQMDSPRHQSDPSEDEDERST
 SKPHSTSRNINLGPTGNPHAKPTDFDFLKVIGKGSFGKVLAKRKLKDGKFYAVKVLQKKIVLNRKEQKHI
 MAERNVLLKNVHPFLVGLHYSFQTTEKLYFVLDVNGGELFFHLQRERSFPEPRARFYAAEIASALGYL
 HSIKIVYRDLKPENILLDSMGHVVLDFGLCKEGIAISDTTTFCTGPEYLAPEVIRKQPYDNTVDWWCL
 GAVLYEMLYGLPPFYCRDVAEMYDNILHKPLNLRPGVSLTAWSILEEELLEKNRQNRGAKEDFLEIQNH
 FFESLSWTDLVQKKIPPPFNPVAGPDDIRNFDAVFTEETVPYSVCVSSDYSIVNASVLEADDAFVGFVSY
 APPSEDLFL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: BC018363

ORF Size: 1287 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: [BC018363](#), [AAH18363](#)

RefSeq Size: 2494 bp

RefSeq ORF: 1289 bp

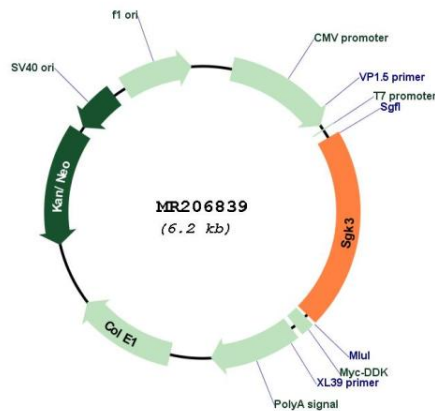
Locus ID: 170755

Cytogenetics: 1 2.08 cM

MW: 91.4 kDa

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]

Product images:


Circular map for MR206839