

Product datasheet for **RC201535**

SGK1 (NM_005627) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SGK1 (NM_005627) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SGK1
Synonyms:	SGK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC201535 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACGGTGAAAACCTGAGGCTGCTAAGGGCACCCCTCACTTACTCCAGGATGAGGGGCATGGTGGCAATTC
 TCATCGCTTTCATGAAGCAGAGGAGGATGGGTCTGAACGACTTTATTCAGAAGATTGCCAATAACTCCTA
 TGCATGCAAACACCCTGAAGTTCAGTCCATCTTGAAGATCTCCCAACCTCAGGAGCCTGAGCTTATGAAT
 GCCAACCCCTTCTCCTCCACCAAGTCTTCTCAGCAAATCAACCTTGGCCCGTCGTCGAATCCTCATGCTA
 AACCATCTGACTTTCACTTCTTGAAGTATCGGAAAGGGCAGTTTTGGAAAGGTTCTTCTAGCAAGACA
 CAAGGCAGAAGAAGTGTCTATGCAGTCAAAGTTTTACAGAAGAAAGCAATCCTGAAAAAGAAAGAGGAG
 AAGCATATTATGTCGGAGCGGAATGTTCTGTTGAAGAATGTGAAGCACCCCTTCTGGTGGGCTTCACT
 TCTCTTCCAGACTGCTGACAAATGTACTTTGCTAGACTACATTAATGGTGGAGAGTGTCTACCA
 TCTCCAGAGGGAACGCTGCTTCTGGAACCACGGGCTCGTTTCTATGCTGCTGAAATAGCCAGTGCCTTG
 GGCTACCTGCATTCACTGAACATCGTTTATAGAGACTTAAACCAGAGAAATTTTGGCTAGATTCACAGG
 GACACATTGTCCTTACTGACTTCGGACTCTGCAAGGAGAACATTGAACACAACAGCACAACATCCACCTT
 CTGTGGCACGCCGGAGTATCTCGCACCTGAGGTGCTTATAAGCAGCCTTATGACAGGACTGTGGACTGG
 TGGTGCCTGGGAGCTGTCTGTATGAGATGCTGTATGGCTGCCGCTTTTTATAGCCGAAACACAGCTG
 AAATGTACGACAACATCTGAACAAGCCTCTCCAGCTGAAACCAATATTACAAATTCGCAAGACACCT
 CCTGGAGGGCCTCCTGCAGAAGGACAGGACAAAGCGGCTCGGGGCAAGGATGACTTCATGGAGATTAAG
 AGTCATGTCTTCTCCTTAATTAAGTGGATGATCTCATTAAAGAAGATTACTCCCCCTTTAACC
 CAAATGTGAGTGGGCCCAACGACCTACGGCACTTGACCCCGAGTTTACCGAAGAGCCTGTCCCAACTC
 CATTGGCAAGTCCCTGACAGCGTCTCGTCACAGCGCTCAAGGAAGCTGCCGAGGCTTTCCTAGGC
 TTTTCTATGCGCCTCCACGGACTCTTTCCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201535 protein sequence
 Red=Cloning site Green=Tags(s)

MTVKTEAAKGTLTYSRMRGMVAIIAFMKQRRMGLNDFIQKIANNYSACKHPEVQSILKISQPQPELMN
 ANPSPPPSPSQINLGPSSNPHAKPSDFHFLKVIKGSFGKVLARHKAEEVFYAVKVLQKKAIIKKKEE
 KHIMSERNVLLKNVKHPFLVGLHFSFQTADKLYFVLDYINGGELFYHLQRERCFLEPRARFYAAEIASAL
 GYLHSLNIVYRDLKPENILLDSQGHIVLTDGLCKENIEHNSTSTFCGTPEYLAPEVLHKQPYDRTVDW
 WCLGAVLYEMLYGLPPFYSRNTAEMYDNILNKPLQLKPNITNSARHLEGLLQKDRTKRLGAKDDFMEIK
 SHVFFSLINWDDLINKKITPPFNPNVSGPNDLRHFDPEFTEEPVPNSIGKSPDSVLVTASVKEAAEAFGL
 FSYAPPTDSFL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6216_a07.zip

Restriction Sites:

Sgfl-Mlul

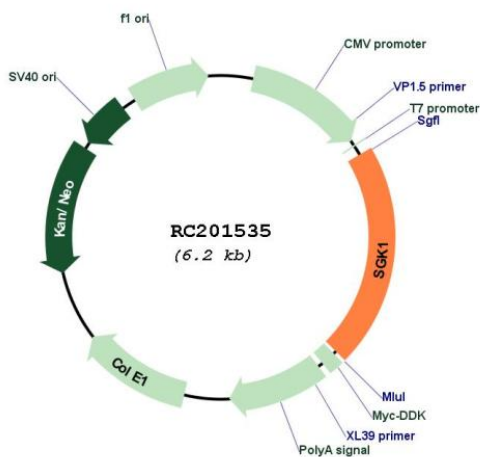
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



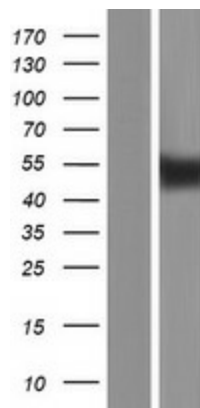
ACCN: NM_005627

ORF Size: 1293 bp

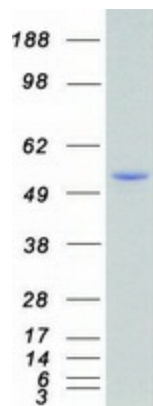
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
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_005627.4
RefSeq Size:	2414 bp
RefSeq ORF:	1296 bp
Locus ID:	6446
UniProt ID:	O00141
Cytogenetics:	6q23.2
Domains:	pkinase, S_TK_X, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
MW:	48.9 kDa

Gene Summary:

This gene encodes a serine/threonine protein kinase that plays an important role in cellular stress response. This kinase activates certain potassium, sodium, and chloride channels, suggesting an involvement in the regulation of processes such as cell survival, neuronal excitability, and renal sodium excretion. High levels of expression of this gene may contribute to conditions such as hypertension and diabetic nephropathy. Several alternatively spliced transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Jan 2009]

Product images:


Western blot validation of overexpression lysate (Cat# [LY417159]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201535 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SGK1 protein (Cat# [TP301535]). The protein was produced from HEK293T cells transfected with SGK1 cDNA clone (Cat# RC201535) using MegaTran 2.0 (Cat# [TT210002]).