

## Product datasheet for **RG221327**

### **Snf1lk2 (SIK2) (NM\_015191) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Snf1lk2 (SIK2) (NM_015191) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SIK2
Synonyms:	LOH11CR1I; QIK; SIK-2; SNF1LK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG221327 representing NM\_015191  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGTCATGGCGGATGGCCCGAGGCACTTGCAGCGCGGGCCGGTCCGGGTGGGGTCTACGACATCGAGG  
 GCACGCTGGGCAAGGGCAACTTCGCTGTGGTGAAGCTGGGGCGGCACCGATCACCAAGACGGAGGTGGC  
 AATAAAAAATAATCGATAAGTCTCAGCTGGATGCAGTGAACCTTGAGAAAACTACCGAGAAGTACAATA  
 ATGAAAAATGTTAGACCACCCCTCACATAATCAAACCTTTATCAGGTAATGGAGACAAAAAGTATGTTGTACC  
 TTGTGACAGAATATGCCAAAAATGGAGAAATTTTGGACTATCTTGCTAATCATGGCCGGTTAAATGAGTC  
 TGAAGCCAGGCGAAAAATCTGGCAAATCCTGTCTGCTGTTGATTATTGTCATGGTCGGAAGATTGTGCAC  
 CGTGACCTCAAAGCTGAAAAATCCTGTGGATAACAACATGAATATCAAATAGCAGATTTCCGTTTTG  
 GAAATTTCTTTAAAAGTGGTGAAGTCTGGCAACATGGTGTGGCAGCCCCCTTATGCAGCCCCAGAAGT  
 CTTTGAAGGGCAGCAGTATGAAGGACCACAGCTGGACATCTGGAGTATGGGAGTTGTTCTTTATGCCTT  
 GTCTGTGGAGCTCTGCCCTTTGATGGACCGACTCTCCAATTTTGAGGCAGAGGGTCTGGAAGGAAGAT  
 TCCGGATTCCGTATTTTCATGTCAGAAGATTGCGAGCACCTTATCCGAAGGATGTTGGTCTAGACCCATC  
 CAAACGGCTAACCATAGCCCAAATCAAGGAGCATAAAATGGATGCTCATAGAAGTTCCTGTCCAGAGACCT  
 GTTCTCTATCCACAAGAGCAAGAAAAATGAGCCATCCATCGGGGAGTTTAAATGAGCAGGTTCTGCGACTGA  
 TGCACAGCCTTGGAAATAGATCAGCAGAAAAACATTGAGTCTTTCAGAGAACAAGAGCTATAACCACTTTGC  
 TGCCATTTATTTCTTGTGGTGGAGCGCCTGAAATCACATCGGAGCAGTTTCCAGTGGAGCAGAGACTT  
 GATGGCCGCCAGCGTCGGCTAGCACCATTGCTGAGCAAACAGTTGCCAAGGCACAGACTGTGGGGCTCC  
 CAGTACCATGCATTCACCGAACATGAGGCTGCTGCCATCTGCCCTCTCCCCAGGCATCCAACGTGGA  
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 CCAAAGGTCAATGGCTGTCTGCTTGACCCTGTGCCTCCTGTCTGGTGGGAAGGGATGCCAGTCACTGC  
 CCAGCAACATGATGGAGACCTCCATTGACGAAGGGCTGGAGACAGAAGGAGAGGCCGAGGAAGACCCCGC  
 TCATGCCTTTGAGGCATTTTCAGTCCACACGCGAGCGGCAGAGACGGCACACTCTGTGAGAAGTGACCAAT  
 CAACTGGTCGTGATGCCTGGGGCAGGAAAAATTTCTCCATGAATGACAGCCCTCCCTTGACAGTGTGG  
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 CATCATGTTAGCCAATCAGCCTTACCCCGCATGACATCTCCCTCATAAGCCTGAGACCTACCAACCCA  
 GCCATGCAGGCTCTGAGCTCCCAGAAACGAGAGGTCCACAACAGGTCTCCAGTGAAGTTCAGAGAGGGCC  
 GCAGAGCATCAGATACCTCCCTACCCAGGGAATTTGATGATTTAGACAACATCTTCAGAATCTGGCTAG  
 AACCAAAGGAATTTAGAGTTGAACAAAGTGCAGTTGTTGATGAACAAATAGGACCCGGAGGCAGACCCCT  
 AACCTGGCGCCGGCGGCTCCTCAGCTCCAGGACCTTGCTAGCAGCTGCCCTCAGGAAGAAGTTTCTCAGC  
 AGCAGGAAAGCGTCTCCACTCTCCCTGCCAGCGTGCATCCCCAGCTGTCCCCAGGCAGAGCCTGGAGAC  
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 AAGTCAGCAGCTGCCCTTCCCCGCCAGGAGACTCCACCGCTTCTCAGCAGGCCCCACCGTTGAGCCTG  
 ACCCAGCCCTGAGCCCCGTCTGGAGCCTTCTCCGAGCAGATGCAATACAGCCCTTTCTCAGCCAGT  
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 CCTGTGATATCCTGTGGATGGAGCCAGCAGAGCGACCTAACGGGGCCAGACTGTCCAGAAAGCCAGG  
 ACTGCAAGAGGCCCTCCAGCTACGACCCACTAGCCCTCTGTGAGCTACCTGGACTCTTTGATTGTGAA  
 ATGCTAGACGCTGTGGATCCACAACACAACGGGTATGTCCTGGTGAAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG221327 representing NM\_015191  
 Red=Cloning site Green=Tags(s)

MVMADGPRHLQRGPVVRVGFYDIEGLGKGNFAVVKLGRHRITKTEVAIKIIDKSQLDVAVNLEKIYREVQI  
 MKMLDHPHIKLYQVMTKSMLYLVTEYAKNGEIFDYLANHGRLENESEARRKFWQILSAVDYCHGRKIVH  
 RDLKAENLLLDNNMNKIIADFGFNGFFKSGELLATWCGSPPYAAPEVFEGQQYEGPQLDIWSMGVLYVYL  
 VCGALPFDGPTLPILRQRVLEGRFRIPYFMSDECEHLIRRMLVLDPSKRLTIAQIKEHKWMLIEVPVQRP  
 VLYPQEQENEPSIGEFNEQVLRMLMHSGLIDQKTIESLQNKSYNHFAAIYFLLVERLKSHRSSFPVEQRL  
 DGRQRRPSTIAEQTVAKAQTVGLPVTMHSNMRLLRSALLPQASNVEAFSFPASGCQAEAAAFMEEECVDT  
 PKVNGCLLDPVPPVLRKGCQSLPSNMMETSIDEGLETEGEAEEDPAHAFAEFQSTRSGQRRHTLSEVTN  
 QLVVMPGAGKIFSMNDSPSLDSVDSEYDMGSVQRDLNFLEDNPSLKDIMLANQPSRMTSPFISLRPTNP  
 AMQALSSQKREVNHRSPVSFREGRRASDTSLTQGI VAFRQHLQNLARTKGILELNKVQLLYEQIGPEADP  
 NLAPAAPQLQDLASSCPQEEVSQQQESVSTLPASVHPQLSPRQSLETQYLQHLRQKPSLLSKAQNTCQLY  
 CKEPFRSLEQQLQEHRLQKRLFLQKQSQLQAYFNQMQUIAESSYPQPSQQLPLPRQETPPPQQAPPFSL  
 TQPLSPVLEPSSEMQMYSFPLSQYQEMQLQPLPSTSGPRAAPPLPTQLQQQPPPPPPPPPPRQPGAAPA  
 PLQF SYQTCELPSAASPADYPTPCQYPVDGAQQSDLTGPDCPRSPGLQEAPSSYDPLALSELPGLFDCE  
 MLDAVDPQHNGYVLVN

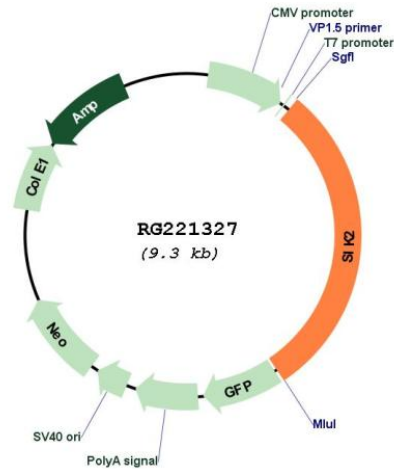
TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_015191

**ORF Size:** 2778 bp

**OTI Disclaimer:** 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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<u>NM_015191.3</u>
RefSeq Size:	5694 bp
RefSeq ORF:	2781 bp
Locus ID:	23235
UniProt ID:	<u>Q9H0K1</u>
Cytogenetics:	11q23.1
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	Phosphorylates 'Ser-794' of IRS1 in insulin-stimulated adipocytes, potentially modulating the efficiency of insulin signal transduction. Inhibits CREB activity by phosphorylating and repressing TORCs, the CREB-specific coactivators.[UniProtKB/Swiss-Prot Function]