

Product datasheet for **RG223406**

SIK3 (NM_025164) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SIK3 (NM_025164) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SIK3
Synonyms:	L19; QSK; SEMDK; SIK-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG223406 representing NM_025164 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCGCCGTATCGGCTACTACGAGATCGACCCACCATCGGCAAGGGCAACTTCGGGTGGTCAAGC
GGGCCACGCACCTCGTCACCAAGGCCAAGTTGCTATCAAGATCATAGATAAGACCCAGCTGGATGAAGA
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TACCAGGTTATGGAGACAGAACGGATGATTTATCTGGTGACAGAATATGCTAGTGGAGGGAAATATTTG
ACCACCTGGTGGCCCATGGTAGAATGGCAGAAAAGGAGGCACGTCGGAAGTTCAAACAGATCGTCACAGC
TGTCTATTTTTGCACTGTCGGAACATTGTTTCATCGTGATTTAAAAGCTGAAAATTTACTTCTGGATGCC
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AGGGCATCAGATGGAGGAGCCAACATCCAACCTGCATGCCAGCAGCTGCTGAAGCGCCACGGGGACCT
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TCCATCTACGTGTATTACAGACATTCTGCTCAGCTACAAGCACCCGAAGTCTCCTTTCAGCATGGAGCAG
GCAGGCGTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG223406 representing NM_025164
 Red=Cloning site Green=Tags(s)

MPARIGYYEIDRTIGKGNFAVVKRATHLVTKAKVAIKIIDKTQLDEENLKKIFREVQIMKMLCHPHIIRL
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 SRGSPSSYSPSTGVGFSPTQALKVPPLDQFPTFPSSAHQPPHYTTSALQQALLSPTPPDYTRHQVPHI
 LQGLLSPRHSLTGHSDIRLPPTFEAQLIKRQQQRQQQQQQQQQEQYQELFRHMNQDAGSLAPSLGGQS
 MTERQALSYQNADSYHHHTSPQHLLQIRAQECVSQASSPTPPHGYAHQPALMHSEMEEDCSEGAKDGF
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 DAVLSQSSLMGSQQFQDGENEECGASLGGHEHPDLSDGSQHLNSSCYPSTCITDILLSYKHPEVSFSMEQ
 AGV

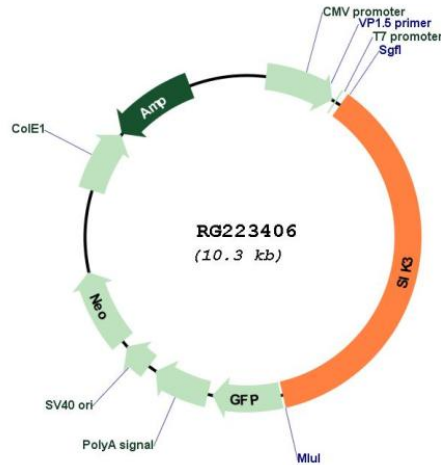
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_025164

ORF Size: 3789 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: [NM_025164.3](#), [NP_079440.2](#)

RefSeq Size: 6072 bp

RefSeq ORF: 3966 bp

Locus ID: 23387

UniProt ID: [Q9Y2K2](#)

Cytogenetics: 11q23.3

Protein Families: Druggable Genome, Protein Kinase

Gene Summary: Positive regulator of mTOR signaling that functions by triggering the degradation of DEPTOR, an mTOR inhibitor. Involved in the dynamic regulation of mTOR signaling in chondrocyte differentiation during skeletogenesis (PubMed:30232230). Negatively regulates cAMP signaling pathway possibly by acting on CRTC2/TORC2 and CRTC3/TORC3 (Probable). Prevents HDAC4 translocation to the nucleus (By similarity).[UniProtKB/Swiss-Prot Function]