

Product datasheet for RC223406

SIK3 (NM_025164) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SIK3 (NM_025164) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SIK3
Synonyms:	L19; QSK; SEMDK; SIK-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223406 representing NM_025164 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCGCCGTATCGGCTACTACGAGATCGACCCACCATCGGCAAGGGCAACTTCGGGTGGTCAAGC
GGGCCACGCACCTCGTCACCAAGCCAAGTTGCTATCAAGATCATAGATAAGACCCAGCTGGATGAAGA
AAACTTGAAGAAGATTTCCGGGAAGTTCAAATTATGAAGATGCTTGGCACCCCATATCATCAGGCTC
TACCAGGTTATGGAGACAGAACGGATGATTTATCTGGTGACAGAATATGCTAGTGGAGGGAAATATTTG
ACCACCTGGTGGCCCATGGTAGAATGGCAGAAAAGGAGGCACGTCGGAAGTTCAAACAGATCGTCACAGC
TGCTATTTTTGTCACTGTCGGAACATTGTTTCATCGTGATTTAAAAGCTGAAAATTTACTTCTGGATGCC
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AGGGCATCAGATGGAGGAGCCAACATCCAACCTGCATGCCAGCAGCTGCTGAAGCGCCACGGGGACCT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence: >RC223406 representing NM_025164
 Red=Cloning site Green=Tags(s)

MPARIGYYEIDRTIGKGNFAVVKRATHLVTKAKVAIKIIDKTQLDEENLKKIFREVQIMKMLCHPHIIRL
 YQVMETERMIYL VTEYASGGEIFDHLVAHGRMAEKEARRKFKQIVTAVYFCHCRNIVHRDLKAENLLDA
 NLNIKIADFGFNLFTPGQLLKTWCGSPPYAAPELFEGKEYDGPVKVDIWSLGVVLYVLCGALPFDGSL
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 PVNIQAEQAGTAMNISVPQVQLINPENQIVEPDGTLNLDSEGEEPSPEALVRYLSMRRHTVGVADPRTE
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 GNCMDRSSPGQAVELPDHNLGYPARPSVHEHHRPRALQRHHTIQNSDDAYVQLDNLPGMSLVAGKALSSARMS
 DAVLSQSSLMGSQQFQDGENEECGASLGGHEHPDLSGQSQHLNSSCYPSTCITDILLSYKHPEVSFSMEQ
 AGV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8011_a12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

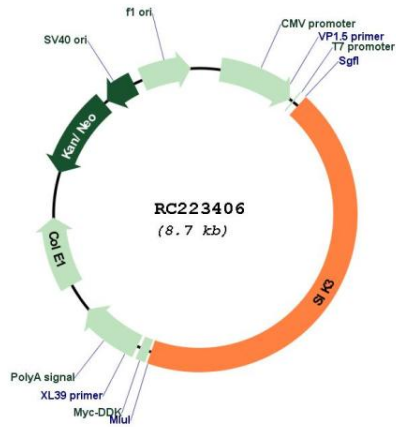


ACCN: NM_025164

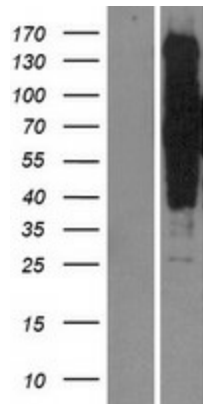
ORF Size: 3789 bp

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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
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
MW:	139.8 kDa
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]

Product images:



Circular map for RC223406



Western blot validation of overexpression lysate (Cat# [LY410862]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223406 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).