

Product datasheet for **RC208396**

SHOC2 (NM_007373) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SHOC2 (NM_007373) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SHOC2
Synonyms:	NSLH1; SIAA0862; SOC2; SUR8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC208396 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGTAGTAGTTTAGGAAAAGAAAAGACTCTAAAGAAAAGATCCCAAAGTACCATCAGCCAAGGAAA
 GAGAAAAGGAGGCAAAAGCCTCTGGAGGTTTGGGAAAAGAGAGCAAGAAAAAGAACCTAAGACCAAAGG
 GAAAGATGCCAAAGATGGAAGAAGGACTCCAGTGCTGCCCAACCAGGGGTGGCATTTCAGTTGACAAT
 ACGATCAAACGGCCAAACCCAGCACCTGGGACTAGAAAAAATCCAGCAATGCAGAGGTGATTAAAGAGC
 TCAACAAATGCCGGAAGAGAATTCAATGCGTTTGGACTTATCCAAGAGATCTATACACATATTGCCATC
 ATCAATCAAAGAGTTGACTCAATTAACAGAACTTTATTTATACAGTAACAAATTCAGTCCCTCCAGCA
 GAGGTGGGATGTTTAGTAAATCTCATGACTGGCTCTAAGTGAAAATTCAGTACCAGTTTGCCTGACT
 CTCTTGATAACTGAAGAAGCTGCGGATGCTTGATTTACGGCATAATAAACTGAGAGAAATTCCTTCAGT
 GGTGTATAGGCTGGATTCTCTACCACTCTTTACCTTCGCTTTAATCGTATAACTACTGTGAAAAGGAC
 ATCAAAAACCTTGCAAACTCAGCATGCTTAGCATTGAGAGAACAAAATTAACAACTACCTGCTGAAA
 TTGGTGAATTATGTAACCTCATTACGCTGGATGTAGCTACAATCAACTGAACACCTTCCAAAGGAGAT
 TGGAACTGTACACAGATAACCAACCTTGACTTGACGACAATGAACTGCTAGACCTCCAGATACTATA
 GGAAACCTGTCCAGTTTAAAGTCGCTTGGTCTGAGATATAACAGACTGTCAGCAATACCCAGATCATTAG
 CAAATGCAGTGCACTTGAAGAATTAATTTAGAGAACAATAACATTTCTACTTTACCAGAGAGTCTTTT
 ATCAAGTCTTGTAAGTGAATAGTTGACCTTAGCTAGAAATGCTTCCAGTTGATCCAGTGGGTGGT
 CCATCTCAGTTTCTACCATCTATTCCCTCAACATGGAACACAATCGAATCAACAAAATTCATTTGGAA
 TTTTCTCCAGAGCAAAAGTATTAAAGTAAGCTGAATATGAAGGACAATCAGTTAACACTCACTCCCTTGG
 TTTTGGAACTTGACCAAGTATGGTAGAATTGAATTTAGCCACTAATCAGCTCACAAAGATCCCTGAGGAT
 GTGTCTGGTCTCGTTTCTCTGAGGTTCTTATCTTATCAAACAATCTTCTAAAGAAGCTTCCCCATGGTC
 TTGAAACCTTAGGAAGTTAAGAGAGTTGGATCTAGAAGAGAACAATGGAATCCTTGCCAAATGAAAT
 TGCATATCTTAAGGATTTACAGAAATTAGTCTTGACAAACAACAGTTGACCACTCTTCCAGAGGCATT
 GGTACCTTACTAATCTCACACATCTGGGCCTTGAGAGAACCTACTTACTCACCTTCTGAAGAAATTG
 GTACACTGGAGAACCTAGAAGAACTGTATTGAATGACAACCCCAACCTGCATAGCCTTCCCTTTGAGCT
 GGCCTCTGCAGCAAGCTTTCAATCATGAGTATTGAGAACTGTCCACTCAGTCACCTTCCACCTCAGATT
 GTTGCTGGGGGCTTCTTTCATCATTCAGTTCTTAAAGATGCAGGTCCATATCGTGCCATGGTC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208396 protein sequence
 Red=Cloning site Green=Tags(s)

MSSSLGKEKDSKEKDPKVPSAKEREKEAKASGGFGKESKEKEPKTKGKDAKDGKKDSSAAQPGVAFSVDN
 TIKRPNPAPGTRKKSSNAEVIKELNKREENSMRLDL SKRSIHILPSSIKELTQLTELYLYSNKLQSLPA
 EVGCLVNLMTLALSENSLTSLPDSLNLKKLRMLDLRHNKLREIPSVVYRLDSL TTYLRFNRITTEKD
 IKNL SKLSML SIRENKIKQLPAEIGELCNLITLDVAHNQLEHLPKEIGNCTQITNLDLQHNELLDLPDTI
 GNLSL SRLGLRYNRLSAIPRSLAKCSALEELNLENNISTLPESLLSSLVKLNSLTLARNCFQLYPVGG
 PSQFSTIYSLNMEHNRINKIPFGIFSRKVL SKLNMKDNQLTSLPLDFGTWTSMVELNLATNQLTKIPED
 VSGLVSLVLI LSNLLKKLPHGLGNLRKLRELDLEENKLES LPNEIAYLKDQLVL TNNQLTTLPRGI
 GHLTNLTHLGLGENLLTHLPEEIGTLENLEELYLNDPNLHSLPFELALCSKLSIMSIENCPLSHLPPQI
 VAGGPSFIIQFLKMGPYRAMV

TRTRPLE**QKLISEEDLAANDILDYKDDDDKV**

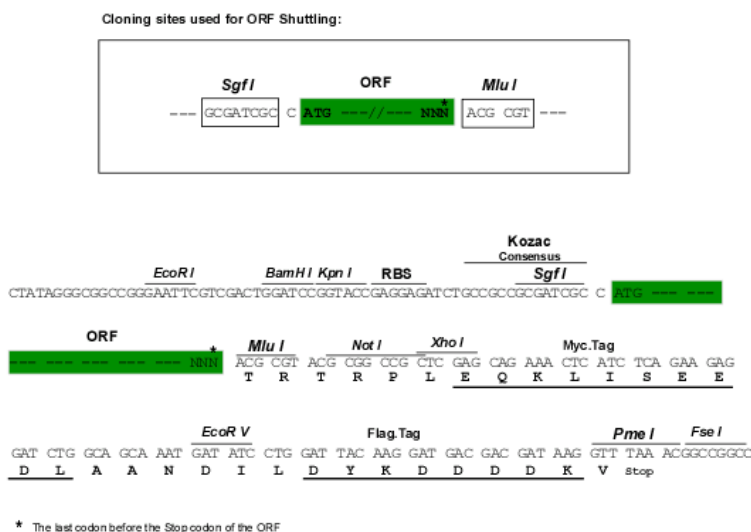
Chromatograms:

https://cdn.origene.com/chromatograms/mk6350_g05.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM 007373

ORF Size: 1746 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22µm filter is required.

RefSeq: NM_007373.4

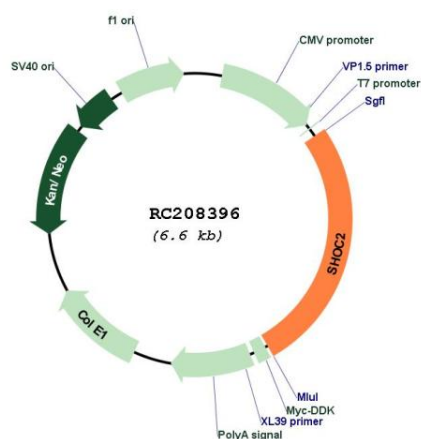
RefSeq Size: 3962 bp

RefSeq ORF: 1749 bp

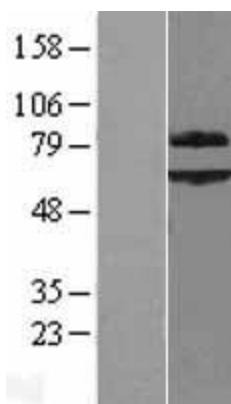
Locus ID: 8036

UniProt ID:	<u>Q9UQ13</u>
Cytogenetics:	10q25.2
Domains:	LRR, LRR_TYP, LRR_BAC
Protein Families:	Druggable Genome
MW:	64.9 kDa
Gene Summary:	This gene encodes a protein that consists almost entirely of leucine-rich repeats, a domain implicated in protein-protein interactions. The protein may function as a scaffold linking RAS to downstream signal transducers in the RAS/ERK MAP kinase signaling cascade. Mutations in this gene have been associated with Noonan-like syndrome with loose anagen hair. [provided by RefSeq, May 2010]

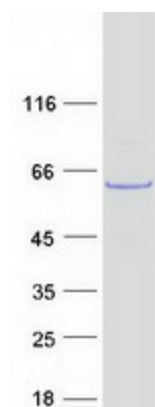
Product images:



Circular map for RC208396



Western blot validation of overexpression lysate (Cat# [LY416022]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208396 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SHOC2 protein (Cat# [TP308396]). The protein was produced from HEK293T cells transfected with SHOC2 cDNA clone (Cat# RC208396) using MegaTran 2.0 (Cat# [TT210002]).