

## Product datasheet for RC216859

### SIN3B (NM\_015260) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SIN3B (NM_015260) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SIN3B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216859 representing NM_015260 Red=Cloning site Blue=ORF Green=Tags(s)

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ATGGCGCACGCTGGCGGTGGCAGCGGTGGCAGCGGTGCCGGCGGCCCGCGGGCCGGGGCTGAGCGGCG  
CCCCTGGGGTCGCTCGGGCTCCGCAGGCCACGAGAAGCTGCCGGTGCACGTAGAAGACGCCCTCACCTA  
TCTGGACCAGGTGAAGATCCGCTTTGGCAGCGACCCTGCCACCTACAACGGCTTCTCGAGATCATGAAG  
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AGGATCCAGCTACCGGCACTCCCAAAACCTACCAGCAGCCAAAGTGCAGTGGGAGGACAGCCATCTGC  
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GGTGATCCAGCGCCGTGCCATTTATCGCATCTATGGCGACAAGGCCCGGAGATCATCGAGAGCCTCAAG  
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ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC216859 representing NM\_015260  
 Red=Cloning site Green=Tags(s)

MAHAGGSGGSGAGGPAGRGLSGARWGRSGSAGHEKLPVHVEDALTYLDQVKIRFGSDPATYNGFLEIMK  
 EFKSQSIDTPGVIRRVSQLFHEHPDLIVGFNAFLPLGYRIDIPKNGKLNISPLTSQENSHNHGDGAEDF  
 KQQVVPYKEDKPQVPLESDSVEFNNAISYVNIKIKTRFLDHPEIYRSFLEILHTYQKEQLNTRGRPF  
 RMSEEEVFTEVANLFRGQEDLLSEFGQFLPEAKRSLFTGNGPCMHVSQKNEHDKTPEHSRKRSRP  
 SLLRPVSA PAKKKMKLRGTDLSIAAVGKYGLQEFDFKVRRLKSEQEYENFLRCIALFNQELVSG  
 SELLQLVSP FLGKFPFLFAQFKSFLGVKELSFAPPMSDRSGDTSREIDYASCKRIGSSYRALPK  
 TYQQPKCSGRTAIC KELDHWTLQGSWTDYCMKFKNTCWIPGYSAGVLNDTWVSFSPWSEDS  
 TFFVSSKTKPYEEQLHRCEDERFELDVVLETNLATIRVLESVQKLSRMAPEDQE  
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 IHAYVGF TMDKL VQNIARQLHHLVSDVCLKVV ELYLNEKKRGAAGNLSRVCRAARETS  
 YQWKAERCMADENCFKVMFLQRKGQVIMTIELDTEEAQTED PVEVQHLARYVEQYV  
 GTEGASSPTEGFLKPVFLQRNLKFRRRWQSEQARALRGEARSSWKRLVGVES  
 ACDVDCRFKLSHKMVFIVNSEDYMYRRGTLCRAKQVQPLVLLRHHQHFEWHSRWLEDNVT  
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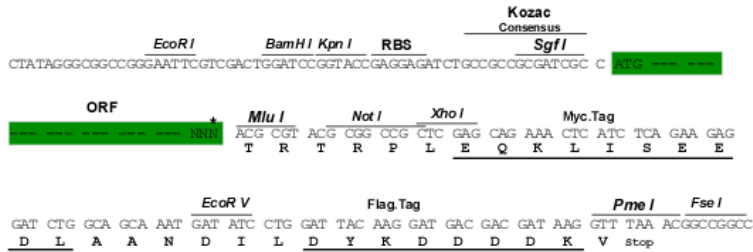
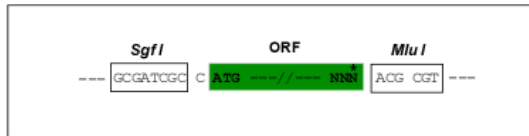
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

ACCN:

NM\_015260

ORF Size:

3486 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.

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

**RefSeq:** [NM\\_015260.4](#)

**RefSeq Size:** 5129 bp

**RefSeq ORF:** 3489 bp

**Locus ID:** 23309

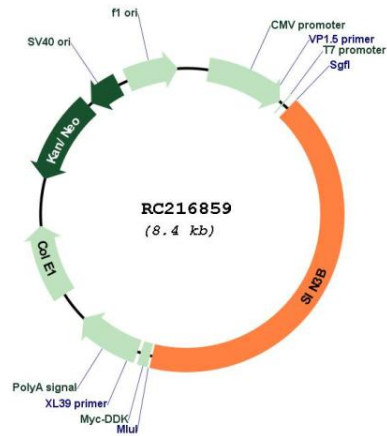
**UniProt ID:** [O75182](#)

**Cytogenetics:** 19p13.11

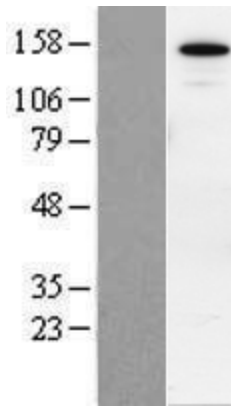
**MW:** 132.9 kDa

**Gene Summary:** Acts as a transcriptional repressor. Interacts with MXI1 to repress MYC responsive genes and antagonize MYC oncogenic activities. Interacts with MAD-MAX heterodimers by binding to MAD. The heterodimer then represses transcription by tethering SIN3B to DNA. Also forms a complex with FOXK1 which represses transcription. With FOXK1, regulates cell cycle progression probably by repressing cell cycle inhibitor genes expression.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC216859



Western blot validation of overexpression lysate (Cat# [LY414651]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216859 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).