

Product datasheet for **MC223067**

Sin3a (BC052716) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sin3a (BC052716) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Sin3a
Synonyms:	AW553200; mKIAA4126; mSin3A; Sin3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>BC052716 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGCGACGTTTGGATGACCAGGAATCACCAGTGTATGCAGCCAGCAGCGAAGGATTCCTGGGAGCA
CAGAGGCTTTTTCTCACCAGCACCGGTCTTGCCTCCGCCCCCTCTGTGTATGAAGCAGTGTCTGAGAC
CATGCAGTCAGCTACAGGCATTCAGTACTCAGTGGCACCCAACTACCAGGTTTCAGCTGTGCCACAAAGT
TCTGGCAGTCATGGGCCGCCATAGCAGCAGTTCATAGCAGCCATCATCACCCAACAGCTGTCCAGCCTC
ATGGAGGCCAGGTGGTCCAGAGCCATGCCACCCAGCACCACAGTTGCACCAGTACAGGGACAGCAGCA
GTTTCAGAGGCTCAAGGTGGAAGACGCCCTGTCTATCTTGACCAGGTGAACTGCAGTTTCGGTAGTCAG
CCTCAGGTCTACAATGATTTCTTGACATCATGAAGGAATTTAAATCTCAGAGCATTGATACTCCAGGAG
TGATTAGCCGAGTGTCCCAGCTATTTAAAGGCCACCCTGATCTGATCATGGGCTTTAACACCTTCTTGCC
TCCTGGCTACAAAATTGAGGTGCAGACTAATGACATGGTGAACGTGACAACACCTGGCCAAGTTCATCAG
ATTCACCCATGGCATCCAGCCCCAGCCTCAGCCACCACCTCAGCATCCTTCCCAGCCTTCATCCCAGT
CAGCTCCCCTCCTGCTCAGCCAGCTCCTCAGCCACAGCTGCCAAAGTCAGCAAGCCTTCCAACACTACA
AGCACACTCCAGCCAGTCAGCAGACTCCCCACTCCCACCATATGCATCCCCAGTTCCTCCACCAGTC
CAGCCTCACACACCAGTGACAATCTCCTTGGGGACAGCTCCATCTTTGCAAAAACAATCAGCCTGTGGAG
TTAATCATGCCATCAACTATGTTAATAAGATCAAGAACAGATTCCAGGGCCAACAGACATCTACAAGC
ATTCTTGAGATTTTGCACACATACCAGAAAGAACAGCGGAATGCCAAGGAAGCTGGAGGAACTACACT
CCAGCTTTGACTGAGCAAGAGGTGTATGCCAGGTGGCTCGACTTTCAAAAACCAGGAAGATTTGTTGT
CTGAATTTGGACAGTTCTGCCAGATGCCAACAGCTCAGTGCTTTTAAAGCAAAAACAATGCTGAGAAGGT
TGATTCTGTGAGAAATGACCATGGAGGCACTGTGAAGAAGCCCCAACTGAATAACAAGCCACAGAGGCC
AGTCAGAATGGCTGCCAGATCCGAGGCACTCTGGAACAGGAGCCACACCTCCAGTGAAGAAAAACCCA
AACTGATGAGTCTAAAAGAGTCTTCAATGGCAGATGCCAGCAAGCATGGTGTGGAACGGAATCATTATT
TTTTGATAAGGTTCGAAAGGCTCTCGGAGTGCAGAGGCCATGAAAACCTCCTTCGTTGCCTTGTATC



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TTAATCAGGAGGTGATCTCTCGGGCCGAGCTTGTACAGCTAGTCTCTCCTTTCTGGGAAATCCCTG
AATTGTTAATTGGTTAAAACTTTTTGGGCTATAAGGAGTCTGTACATCTGAAAAGCTTTCCAAAGGA
ACGAGCTACAGAAGGCATTGCCATGGAGATAGACTATGCCTCTTGTAACGACTGGGCTCTAGCTACCGA
GCCCTACCGAAAAGTTACCAGCAGCCAAAGTGCACGGGACGGACTCCTCTGTGTAAGAGGTTTTAAATG
ATACCTGGGTTTCTTCCCATCTGGTCTGAAGACTCCACTTTTGTTAGTTCCAAGAAGACTCAGTATGA
AGAACATATTTACCGTTGTGAAGATGAACGATTTGAGCTTGATGTGGTTCTTGAGACCAATCTTGCAACA
ATCCGGGTTTTAGAAGCAATACAGAAAAAATTTCTCGTTGTCTGCTGAGGAACAAGCCAAATTTGCTG
TGGATAACACCCTTGAGGCACGTCCGAAGTCATCCATCGAAAAGCACTCCAGAGGATATATGCTGACAA
AGCAGCTGATATCATCGATGGCCTGAGGAAGAACCCTCCATTGCTGTTCCGATTGCTCTTAAAAGTTG
AAGATGAAAGAAGAAGAGTGGCGAGAAGCTCAGAGAGGCTTCAACAAGGTCTGGCGAGAGCAAAATGAGA
AGTACTACTTGAAGTCTCTGGATCACCAGGCATCAACTTCAAGCAGAACGACACTAAGGTCTTGAGGTC
TAAGAGCTTACTCAATGAGATCGAGAGCATCTATGACGAGAGGCAAGAGCAGGCTACAGAAGAGAACGCT
GGTGTACCTGTTGGCCCGACCTCTCTCTTGCCTATGAAGACAAACAGATACTAGAAGATGCTGCTGCTC
TGATTATCCACCATGTGAAGAGGCAACAGGCATTGAGAAAGAGGACAAATACAAATCAAGCAAATCAT
GCACCATTTCTTCTGACCTGTGTTTGTCTCAGAGAGGCGATCTCTCAGATGTGAAGAAGAGGAGGAG
GAAGAAATGGATGTGGATGAAGCAACAGGAGCACCTAAGAAGCACAATGGTGTGGGGGAGCCCCCTA
AGTCCAAGTTGCTATTTAGTAACACAGCAGCTCAAAAAGTTAAGAGGGATGGATGAAGTATAAACCTTTT
CTATGTCAATAACAATGGTATATCTTTATGCGACGGCATCAAATTTCTGCTTGAGGCTGCTACGGATT
TGTTTCCAAGCTGAACGGCAAAATGAAGAAGAAAACCGAGAGAGAGAATGGGAACGGGAGGTGCTAGGCA
TAAAGCGAGACAAGAGTGATAGTCTGCCATACAACACTACGTCTCAAGGAACCTATGGATGTTGATGTAGA
AGATTATACCCAGCTTCTCGGACATGGTGGGAGCCTGCTTGATGGCAACATAGACTCATCACAGTAT
GAAGATTCAGTACAGAGAGATGTTACCATTATGCCTACATTGCCTTTACTATGGACAAATTAATCCAGA
GCATCGTCAGACAGCTACAGCACATCGTCAGCGACGAGGCTGTGTGCAGGTTACTGATCTTTACTTGGC
AGAAAACAATAACGGAGCCACGGGAGGCCAGCTCAACAGTCAGACTTCAAGGAGCCTTCTGGAGTCAGCA
TACCAGCGGAAGGCAGAGCAGCTTATGTGATGAGAAGTCTTCAAGCTAATGTTCAATCAAAAGTCAAG
GTCAAGTTCAGCTGACTGTTGAGCTCCTGGACACAGAAGAGGAGAACTCAGATGACCCCGTGAAGCAGA
GGTGTGGACACGTTGGTCAGACTACGTGGAGCGATATATGAGTCTGATACTACTTCTCCTGAACTTCGA
GAACATCTGGCACAGAAACAGTATTTCTCCAAAGGAATTTGCGGCGTATCCGGAAGTGTCAACGTGGTC
GAGAGCAACAGGAAAAAGAGGAAAGAAAGCAAGCAAGAAGACCATGGAAAATGTAGAGGCGCTGGT
ACCCTGCACCACCCTGTGATACAGAGACTCTGCACTTTGTGAGCATTAAACAAATATCGTGTCAAATAC
GGCACAGTATTCAAAGCCCTTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** BC052716
- Insert Size:** 3594 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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: [BC052716](#), [AAH52716](#)

RefSeq Size: 4820 bp

RefSeq ORF: 3593 bp

Locus ID: 20466

Cytogenetics: 9 30.89 cM

Gene Summary: Acts as a transcriptional repressor. Corepressor for REST. Interacts with MXI1 to repress MYC responsive genes and antagonize MYC oncogenic activities. Also interacts with MXD1-MAX heterodimers to repress transcription by tethering SIN3A to DNA. Acts cooperatively with OGT to repress transcription in parallel with histone deacetylation. Involved in the control of the circadian rhythms. Required for the transcriptional repression of circadian target genes, such as PER1, mediated by the large PER complex through histone deacetylation. Cooperates with FOXK1 to regulate cell cycle progression probably by repressing cell cycle inhibitor genes expression (PubMed:22476904). Required for cortical neuron differentiation and callosal axon elongation (PubMed:27399968).[UniProtKB/Swiss-Prot Function]