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Product datasheet for MC224128

Sin3a (NM_001110350) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sin3a (NM_001110350) 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:

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>MC224128 representing NM_001110350
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGCGACGTTTGGATGACCAGGAATCACCAGTGTATGCAGCCCAGCAGCGAAGGATTCCTGGGAGCA
CAGAGGCTTTTTCTCACCAGCACCGGGTCCTTGCCCCGGCCCCTCCTGTGTATGAAGCAGTGTCTGAGAC
CATGCAGTCAGCTACAGGCATTCAGTACTCAGTGGCACCCAACTACCAGGTTTCAGCTGTGCCACAAAGT
TCTGGCAGTCATGGGCCCGCCATAGCAGCAGTTCATAGCAGCCATCATCACCCAACAGCTGTCCAGCCTC
ATGGAGGCCAGGTGGTCCAGAGCCATGCCCACCCAGCACCACCAGTTGCACCAGTACAGGGACAGCAGCA
GTTTCAGAGGCTCAAGGTGGAAGACGCCCTGTCCTATCTTGACCAGGTGAAACTGCAGTTCGGTAGTCAG
CCTCAGGTCTACAATGATTTCCTTGACATCATGAAGGAATTTAAATCTCAGAGCATTGATACTCCAGGAG
TGATTAGCCGAGTGTCCCAGCTATTTAAAGGCCACCCTGATCTGATCATGGGCTTTAACACCTTCTTGCC
TCCTGGCTACAAAATTGAGGTGCAGACTAATGACATGGTGAACGTGACAACACCTGGCCAAGTTCATCAG
ATTCCCACCCATGGCATCCAGCCCCAGCCTCAGCCACCACCTCAGCATCCTTCCCAGCCTTCATCCCAGT
CAGCTCCCACTCCTGCTCAGCCAGCTCCTCAGCCCACAGCTGCCAAAGTCAGCAAGCCTTCCCAACTACA
AGCACATACTCCAGCCAGTCAGCAGACTCCCCCACTCCCACCATATGCATCCCCACGTTCTCCACCAGTC
CAGCCTCACACACCAGTGACAATCTCCTTGGGGACAGCTCCATCTTTGCAAAACAATCAGCCTGTGGAGT
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ATTCTTGGAGATTTTGCACACATACCAGAAAGAACAGCGGAATGCCAAGGAAGCTGGAGGAAACTACACT
CCAGCTTTGACTGAGCAAGAGGTGTATGCCCAGGTGGCTCGACTCTTCAAAAACCAGGAAGATTTGTTGT
CTGAATTTGGACAGTTCCTGCCAGATGCCAACAGCTCAGTGCTTTTAAGCAAAACAACTGCTGAGAAGGT
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AGTCAGAATGGCTGCCAGATCCGCAGGCACTCTGGAACAGGAGCCACACCTCCAGTGAAGAAAAAACCCA
AACTGATGAGTCTAAAAGAGTCTTCAATGGCAGATGCCAGCAAGCATGGTGTTGGAACGGAATCATTATT
TTTTGATAAGGTTCGAAAGGCTCTTCGGAGTGCAGAGGCCTATGAAAACTTCCTTCGTTGCCTTGTTATC
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TTTAATCAGGAGGTGATCTCTCGGGCCGAGCTTGTACAGCTAGTCTCTCCTTTTCTGGGGAAATTCCCTG
AATTGTTTAATTGGTTTAAAAACTTTTTGGGCTATAAGGAGTCTGTACATCTGGAAAGCTTTCCAAAGGA
ACGAGCTACAGAAGGCATTGCCATGGAGATAGACTATGCCTCTTGTAAACGACTGGGCTCTAGCTACCGA
GCCCTACCGAAAAGTTACCAGCAGCCCAAGTGCACGGGACGGACTCCTCTGTGTAAAGAGGTTTTAAATG
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TGGATAACACCCTTGGAGGCACGTCCGAAGTCATCCATCGAAAAGCACTCCAGAGGATATATGCTGACAA
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GGTGTACCTGTTGGCCCGCACCTCTCTCTTGCCTATGAAGACAAACAGATACTAGAAGATGCTGCTGCTC
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GCACCATTTCATTCCTGACCTGCTGTTTGCTCAGAGAGGCGATCTCTCAGATGTGGAAGAAGAGGAGGAG
GAAGAAATGGATGTGGATGAAGCAACAGGAGCACCTAAGAAGCACAATGGTGTTGGGGGCAGCCCCCCTA
AGTCCAAGTTGCTATTTAGTAACACAGCAGCTCAAAAGTTAAGAGGGATGGATGAAGTATATAACCTTTT
CTATGTCAATAACAATTGGTATATCTTTATGCGACTGCATCAAATTCTCTGCTTGAGGCTGCTACGGATT
TGTTCCCAAGCTGAACGGCAAATTGAAGAAGAAAACCGAGAGAGAGAATGGGAACGGGAGGTGCTAGGCA
TAAAGCGAGACAAGAGTGATAGTCCTGCCATACAACTACGTCTCAAGGAACCTATGGATGTTGATGTAGA
AGATTATTACCCAGCTTTCCTGGACATGGTGCGGAGCCTGCTTGATGGCAACATAGACTCATCACAGTAT
GAAGATTCACTGAGAGAGATGTTCACCATTCATGCCTACATTGCCTTTACTATGGACAAATTAATCCAGA
GCATCGTCAGACAGCTACAGCACATCGTCAGCGACGAGGTCTGTGTGCAGGTTACTGATCTTTACTTGGC
AGAAAACAATAACGGAGCCACGGGAGGCCAGCTCAACAGTCAGACTTCAAGGAGCCTTCTGGAGTCAGCA
TACCAGCGGAAGGCAGAGCAGCTTATGTCAGATGAGAACTGCTTCAAGCTAATGTTCATTCAAAGTCAAG
GTCAAGTTCAGCTGACTGTTGAGCTCCTGGACACAGAAGAGGAGAACTCAGATGACCCCGTGGAAGCAGA
GGTGTGGACACGTTGGTCAGACTACGTGGAGCGATATATGAGTTCTGATACTACTTCTCCTGAACTTCGA
GAACATCTGGCACAGAAACCAGTATTTCTCCCAAGGAATTTGCGGCGTATCCGGAAGTGTCAACGTGGTC
GAGAGCAACAGGAAAAAGAAGGGAAAGAAGGAAACAGCAAGAAGACCATGGAAAATGTAGAGAGCCTGGA
TAAGCTGGAGTGTAGGTTCAAGCTGAACTCCTATAAGATGGTATATGTGATCAAATCGGAGGACTACATG
TACCGGAGAACTGCTCTACTCAGAGCTCATCAGTCCCATGAGCGTGTAAGCAAGCGTCTGCATCAGCGGT
TCCAGGCCTGGGTGGATAAATGGACCAAGGAGCATGTGCCTCGGGAAATGGCAGCAGAGACCAGCAAATG
GCTCATGGGTGAGGGGCTCGAGGGCCTGGTACCCTGCACCACCACCTGTGATACAGAGACTCTGCACTTT
GTGAGCATTAACAAATATCGTGTCAAATACGGCACAGTATTCAAAGCCCCTTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001110350

Insert Size: 3834 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).

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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_001110350.1, NP_001103820.1

RefSeq Size: 5130 bp

RefSeq ORF: 3834 bp

Locus ID: 20466

UniProt ID: Q60520

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]
Transcript Variant: This variant (2) differs in the 5' UTR and uses an alternate in-frame splice junction compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is longer compared to isoform 1.

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