

Product datasheet for MR211790

Sin3a (BC052716) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sin3a (BC052716) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sin3a
Synonyms:	AW553200; mKIAA4126; mSin3A; Sin3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR211790 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGCGACGTTTGGATGACCAGGAATCACCAGTGTATGCAGCCAGCAGCGAAGGATTCCTGGGAGCA
CAGAGGCTTTTTCTCACCAGCACCGGTCTTGCCTCCGCCCCCTCTGTGTATGAAGCAGTGTCTGAGAC
CATGCAGTCAGCTACAGGCATTCAGTACTCAGTGGCACCCAACTACCAGGTTTCAGCTGTGCCACAAAGT
TCTGGCAGTCATGGGCCGCCATAGCAGCAGTTCATAGCAGCCATCATCACCCAACAGCTGTCCAGCCTC
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GTTTCAGAGGCTCAAGGTGGAAGACGCCCTGTCTATCTTGACCAGGTGAACTGCAGTTCCGGTAGTCAG
CCTCAGGTCTACAATGATTTCTTGACATCATGAAGGAATTTAAATCTCAGAGCATTGATACTCCAGGAG
TGATTAGCCGAGTGTCCCAGCTATTTAAAGGCCACCCTGATCTGATCATGGGCTTTAACACCTTCTTGCC
TCCTGGCTACAAAATTGAGGTGCAGACTAATGACATGGTGAACGTGACAACACCTGGCCAAGTTCATCAG
ATTCACCCATGGCATCCAGCCCCAGCCTCAGCCACCACCTCAGCATCCTTCCCAGCCTTCATCCCAGT
CAGCTCCCCTCCTGCTCAGCCAGCTCCTCAGCCACAGCTGCCAAAGTCAGCAAGCCTTCCAACACTACA
AGCACATACTCCAGCCAGTCAGCAGACTCCCCACTCCCACCATATGCATCCCCAGTTCCTCCACAGTC
CAGCCTCACACACCAGTGACAATCTCCTTGGGGACAGCTCCATCTTTGCAAAAACAATCAGCCTGTGGAG
TTAATCATGCCATCAACTATGTTAATAAGATCAAGAACAGATTCCAGGGCCAACAGACATCTACAAGC
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CCAGCTTTGACTGAGCAAGAGGTGTATGCCAGGTGGCTCGACTCTTCAAAAACCAGGAAGATTTGTTGT
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TTTAATCAGGAGGTGATCTCTCGGGCCGAGCTTGACAGCTAGTCTCTCCTTTTCTGGGAAATCCCTG
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ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR211790 protein sequence
 Red=Cloning site Green=Tags(s)

MKRRLDDQESPVYAAQRRIPGSTEAFSHQHRVLAPAPPVYEAVSETMQSATGIQYSVAPNYQVSAVPQS
 SGGHGPAAVHSSHHHTAVQPHGGQVVQSHAHPAPPVAPVQGGQQFQRLKVEDALSYLDQVKLQFGSQ
 PQVYNDFLDIMKEFKSQSIDTPGVISRVSQLFKGHPDLIMGFNTFLPPGYKIEVQTNMNVNVTTPGQVHQ
 IPTHGIQPQPQPPQHPSPSSQSAPTPAQPAQPPTAAKVSKPSQLQAHTPASQQTPPLPPYASPRSPV
 QPHTPVTISLGTAPSLQNNQPVEFNHAINVYVNIKNRFQGPDIYKAFLEILHTYQKEQRNAKEAGGNYT
 PALTEQEYVAQVARL FKNQEDLLSEFGQFLPDANSSVLLSKTTAEKVDSVRNDHGGTVKKPQLNKNPQRP
 SQNGCQIRRHSGTGATPPVKKPKLMSLKESMADASKHGVGTESLFFDKVRKALRSAEAYENFLRCLVI
 FNQEVISRAELVQLVSPFLGKFPFLFNWFKNFLGYKESVHLESFPKERATEGIAMEIDYASCKRLGSSYR
 ALPKSYQQPKCTGRTPCKEVLNNTWVSPSWSEDSTFVSSKKTQYEEHIYRCEDERFELDVVLETNLAT
 IRVLEAIQKKLSRLSAEEQAKFRDNTLGGTSEVIHRKALQRIYADKAADIIDGLRKNPSIAVPIVLKRL
 KMKEEWEWAQRGFNKVWREQNEKYLLKSLDHQGINFKQNDTKVLRSKSLLNEIESIYDERQEATEENA
 GVPVPHLSLAYEDKQILEDAAALIIHHVKRQTGIQKEDKYKIKQIMHHFIPDLLFAQRGDLSDVEEEEE
 EEMDVDEATGAPKKHNGVGGSPKSKLLFNNTAAQKLRGMDEVNLFYVNNNWIIFMRRHQILCLRLRI
 CFQAEQIEEENREREWEREVLGIKRDKSDSPAIQLRLKEPMDVDVEDYYPFLDMVRSLLDGNIDSSQY
 EDLSLREMTIHAYIAFTMDKLIQSIVRQLQHIVSDEVCVQVTDLYLAENNNGATGGQLNSQTSRSLLESA
 YQRKAEQLMSDENCFLMFIQSQQVQLTVELLDTEEENSDDPVEAEVWTRWSDYVERYMSSDTTSPELR
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 GTVFKAP

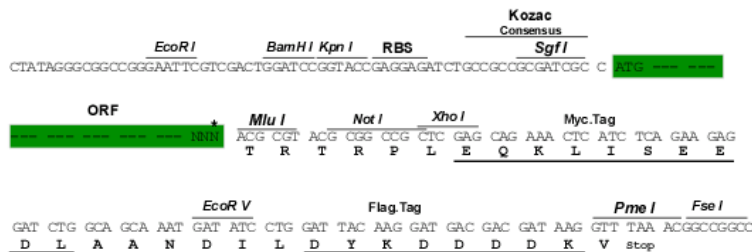
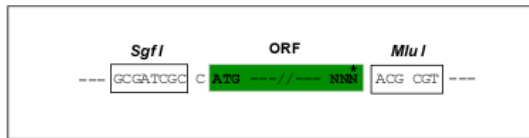
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



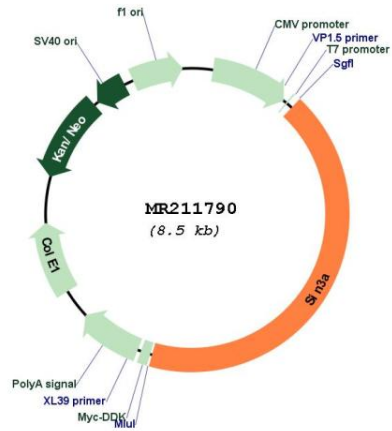
* The last codon before the Stop codon of the ORF

ACCN: BC052716

ORF Size: 3591 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.
RefSeq:	BC052716 , AAH52716
RefSeq Size:	4820 bp
RefSeq ORF:	3593 bp
Locus ID:	20466
Cytogenetics:	9 30.89 cM
MW:	135.8 kDa
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]

Product images:



Circular map for MR211790