OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR225374

Satb2 (NM_139146) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Satb2 (NM_139146) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Satb2
Synonyms:	mKIAA1034
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR225374 representing NM_139146
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCGGCGGAGCGAGAGCCCGTGTCTTCGGGACAGCCCCGACCGAAGAAGCGGCAGCCCCGACGTCA
AGGGGCCTCCCCCGGTGAAGGTGGCCCGGCTGGAGCAGAACGGCAGCCCCATGGGAGCCCGCGGGAGGCC
CAACGGCGCCGTGGCCAAGGCCGTGGGAGGTTTGATGATTCCAGTTTTCTGTGTGGTGGAGCAGTTGGAT
GGCTCTCTTGAATACGACAACCGAGAAGAGCACGCTGAGTTCGTCTTGGTGCGGAAAGATGTGCTTTTTA
GCCAGCTGGTGGAGACCGCGCTCCTGGCCCTGGGGTATTCCCACAGCTCTGCAGCGCAGGCCCAAGGAAT
AATCAAGCTAGGGAGGTGGAACCCCCTCCCCCTCAGTTATGTGACAGACGCCCCTGATGCGACTGTGGCC
GACATGCTGCAAGATGTCTATCACGTTGTGACGCTGAAGATCCAATTACAAAGTTGTTCAAAGTTGGAAG
ACTTGCCTGCGGAGCAATGGAACCACGCCACCGTCCGCAATGCCTTAAAGGAACTGCTCAAAGAAATGAA
CCAGAGCACATTAGCCAAAGAATGCCCTCTCTCCCAGAGTATGATTTCATCCATTGTAAATAGCACATAC
TATGCCAATGTGTCAGCAACCAAGTGCCAGGAGTTTGGGAGATGGTACAAAAAGTATAAGAAGATAAAAG
TGGAAAGAGTGGAGCGAGAGAACCTTTCAGACTATTGTGTTCTGGGCCAGCGGCCAATGCATTTACCAAA
TATGAACCAGCTGGCATCCCTGGGCAAAACCAACGAACAGTCTCCTCATAGCCAAATCCACCACAGTACT
CCAATCCGAAACCAAGTGCCCGCACTCCAGCCCATCATGAGCCCTGGTCTTCTCTCACCGCAGCTCAGTC
CTCAGCTTGTCAGGCAGCAAATAGCCATGGCCCATCTGATAAACCAACAGATAGCCGTTAGCCGACTCCT
GGCTCACCAGCATCCTCAAGCCATCAACCAGCAGTTCTTGAACCACCCACCCATTCCCAGAGCAGTTAAG
CCAGAGCCAACAAACTCCTCTGTGGAAGTCTCTCCTGATATCTACCAGCAAGTTAGAGATGAGTTGAAGA
GGGCTAGTGTGTCTCAAGCTGTCTTTGCAAGAGTGGCATTCAACCGCACACAGGGATTATTGTCAGAGAT
ACTGCGTAAGGAAGAAGATCCCAGGACTGCGTCTCAGTCTCTTCTAGTAAACCTGAGGGCCATGCAGAAC
TTCCTCAACCTGCCTGAAGTGGAGCGTGATCGCATTTACCAGGATGAGCGAGAGAGGAGCATGAACCCCA
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TCTCTGCACCATCCGCCGTTTCCTGAATCTTCCCCAACATGAGCGGGATGTGATCTATGAGGAAGAATCT
CGACATCACCACAGTGAACGCATGCAGCATGTGGTCCAGCTCCCACCTGAGCCCGTGCAGGTCCTTCATC
GACAGCAGTCCCAGCCAACTAAGGAGAGCTCCCCTCCCAGAGAAGAAGCACCCCCACCGCCTCCTCCAAC
AGAAGACAGCTGTGCCAAAAAGCCTCGGTCTCGCACAAAGATCTCTTTGGAAGCCCTGGGCATCCTTCAA
AGCTTCATCCATGATGTAGGCCTCTATCCCGACCAGGAAGCCATCCACACACTCTCCGCCCAGCTGGATC
TCCCCAAACACACCATCATCAAGTTCTTCCAGAACCAGAGGTACCACGTGAAGCACCATGGCAAGCTGAA
GGAGCACCTGGGCTCCGCCGTGGACGTGGCAGAGTATAAGGACGAGGAGCTGCTGACCGAGTCCGAGGAG
AATGACAGTGAGGAAGGCTCGGAGGAGATGTACAAGGTGGAGGCCGAGGAAGAGAATGCCGACAAGAGCA
AGGCTGCACCGGCCGAAACCGACCAGAGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR225374 representing NM_139146
Red=Cloning site Green=Tags(s)

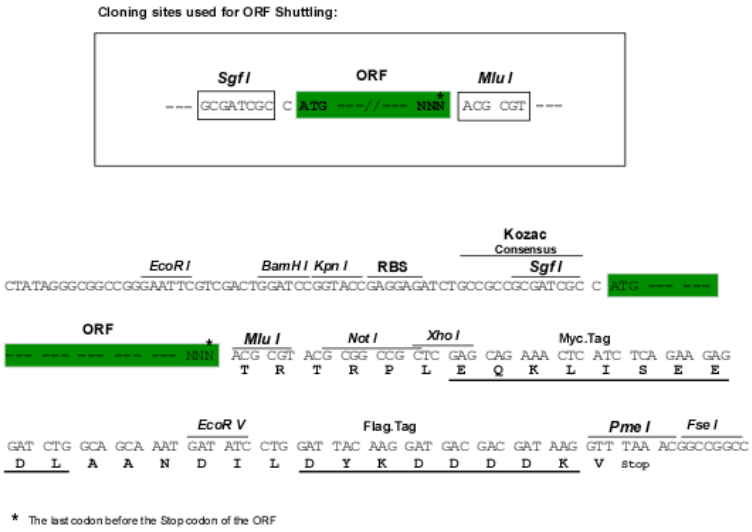
MERRSESPCLRDSPDRRSGSPDVKGPPPVKVARLEQNGSPMGARGRPNGAVAKAVGGLMIPVFCVVEQLD
GSLEYDNREEHAEFVLVRKDVLFSQLVETALLALGYSHSSAAQAQGIIKLGRWNPLPLSYVTDAPDATVA
DMLQDVYHVVTLKIQLQSCSKLEDLPAEQWNHATVRNALKELLKEMNQSTLAKECPLSQSMISSIVNSTY
YANVSATKCQEFGRWYKKYKKIKVERVERENLSDYCVLGQRPMHLPNMNQLASLGKTNEQSPHSQIHHST
PIRNQVPALQPIMSPGLLSPQLSPQLVRQQIAMAHLINQQIAVSRLLAHQHPQAINQQFLNHPPIPRAVK
PEPTNSSVEVSPDIYQQVRDELKRASVSQAVFARVAFNRTQGLLSEILRKEEDPRTASQSLLVNLRAMQN
FLNLPEVERDRIYQDERERSMNPNVSMVSSASSSPSSSRTPQAKTSTPTTDLPIKVDGANVNITAAIYDE
IQQEMKRAKVSQALFAKVAANKSQGWLCELLRWKENPSPENRTLWENLCTIRRFLNLPQHERDVIYEEES
RHHHSERMQHVVQLPPEPVQVLHRQQSQPTKESSPPREEAPPPPPPTEDSCAKKPRSRTKISLEALGILQ
SFIHDVGLYPDQEAIHTLSAQLDLPKHTIIKFFQNQRYHVKHHGKLKEHLGSAVDVAEYKDEELLTESEE
NDSEEGSEEMYKVEAEEENADKSKAAPAETDQR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9040_d11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



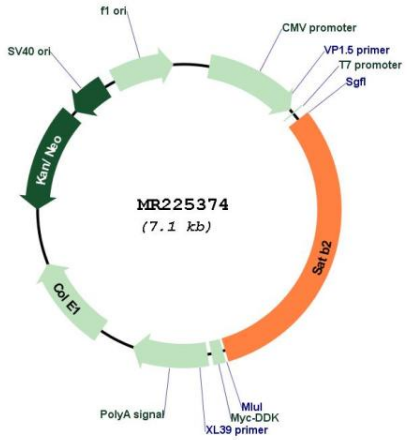
ACCN: NM_139146

ORF Size: 2199 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 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.
RefSeq:	NM_139146.2, NP_631885.1
RefSeq Size:	5299 bp
RefSeq ORF:	2202 bp
Locus ID:	212712
UniProt ID:	Q8VI24
Cytogenetics:	1 C1.3
MW:	83 kDa

Gene Summary: Binds to DNA, at nuclear matrix- or scaffold-associated regions. Thought to recognize the sugar-phosphate structure of double-stranded DNA. Transcription factor controlling nuclear gene expression, by binding to matrix attachment regions (MARs) of DNA and inducing a local chromatin-loop remodeling. Acts as a docking site for several chromatin remodeling enzymes and also by recruiting corepressors (HDACs) or coactivators (HATs) directly to promoters and enhancers. Required for the initiation of the upper-layer neurons (UL1) specific genetic program and for the inactivation of deep-layer neurons (DL) and UL2 specific genes, probably by modulating Bcl11b expression. Repressor of Ctip2 and regulatory determinant of corticocortical connections in the developing cerebral cortex. May play an important role in palate formation. Acts as a molecular node in a transcriptional network regulating skeletal development and osteoblast differentiation.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR225374