

Product datasheet for **RC216909**

SATB2 (NM_015265) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SATB2 (NM_015265) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SATB2
Synonyms:	GLSS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC216909 representing NM_015265
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGCGCGGGAGCGAGAGCCCGTGTCTGCGGGACAGCCCCGACCGCGGAGCGGCAGCCCGGACGTCA
 AGGGGCCTCCCCAGTGAAGGTGGCCCGCTGGAGCAGAACGGCAGCCCCATGGGAGCCCGGGAGGCC
 CAACGGCGCCGTGGCCAAGGCCGTGGGAGTTTGTGATTCTGTCTTTTGTGTCGTGGAGCAGTTGGAC
 GGCTCTCTTGAATATGACAACAGAGAAGAACACGCCGAGTTTGTCTGGTGCGGAAAGATGTGCTTTTAA
 GCCAGCTGGTGGAGACTGCGCTCCTGGCCCTGGGGTATTCTCACAGCTCTGCGGCCAGGCCCAAGGAAT
 AATCAAGCTGGGAAGGTGGAACCCTCTCCCTCAGTTATGTGACAGATGCACCCGACGCGCAGCTGGCC
 GACATGCTACAAGATGTCTATCATGTTGTGACGTTGAAAATCCAATTACAAAGTTGTTCAAAGTTGGAAG
 ACTTGCCCTGCGGAGCAGTGAACCATGCCACAGTCCGCAATGCCTAAAGGAAGTCTCAAAGAGATGAA
 CCAGAGCACATTAGCCAAAGAATGCCCTCTCTCCAGAGTATGATTTTATCCATTGTAATAGCACATAT
 TATGCCAATGTGTGAGCAACCAAGTCCAGGAGTTGGGAGATGGTATAAAAAGTACAAGAAGATTAAGG
 TGGAAAGAGTGGAAACGAGAAAACCTTTCAGACTATTGTGTTCTGGGCCAGCGTCCAATGCATTTACCAAA
 TATGAACCAGCTGGCATCCCTGGGGAAAACCAACGAACAGTCTCCTCACAGCCAAATTCACCACAGTACT
 CCAATCCGAAACCAAGTCCCGCATTACAGCCCATCATGAGCCCTGGTCTTCTTTCTCCCGAGCTTAGTC
 CACAACCTGTAAGGCAACAAATAGCCATGGCCCATCTGATAAACCAACAGATTGCCGTTAGCCGGCTCCT
 GGCTCACAGCATCCTCAAGCCATCAACCAGCAGTTCTGAAACCATCCACCCATCCCAGAGCAGTTAAG
 CCAGCCAAACCAACTCTCCGTGGAAGTCTCTCCAGATATCTACCAGCAAGTCAAGAGATGAGTGAAGA
 GGGCCAGTGTGTCCCAAGCTGTCTTTGCAAGAGTGGCATTCAACCGCACACAGGGATTGTTGTCTGAGAT
 TCTGCGTAAGGAAGAAGACCCTCGGACAGCCTCTCAGTCTCTTCTAGTAAACCTGAGGGCCATGCAGAA
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 ATGTGAGCATGGTCTCCTCGGCCTCCAGCAGTCCAGCTCCTCCCGAACCCCTCAGGCCAAAACCTCGAC
 ACCGACAACAGACCTCCCTATTAAGGTGGACGGCGCCAACATCAACATCACAGCTGCCATTTATGACGAG
 ATCCAACAGGAGATGAAAAGGGCCAAGGTGTCTCAAGCCCTGTTGCCAAAGTGGCTGCAATAAAAAGTC
 AGGGCTGGCTGTGTGAAGTCTCCGCTGGAAGGAGAACCAAGCCAGAAAACCGCACCCCTCTGGGAAAA
 CCTCTGTACCATCCGTCGCTTCTGAACCTTCCCAGCATGAGAGGGATGTCATCTATGAGGAGGAGTCA
 AGGCATCACACAGCGAACGCATGCAACACGTGGTCCAGCTTCCCCTGAGCCGGTGCAGTACTTCATA
 GACAGCAGTCTCAGCCAGCCAAGGAGAGTCCCTCCCAGAGAAGAAGCGCCTCCCCACCTCCTCCGAC
 TGAAGACAGTTGTGCCAAAAGCCCGGTCTCGCACAAAAGATCTCCTTAGAAGCCCTGGGGATCCTCCAA
 AGCTTTATTATGATGTAGGCCTGTACCAGACCAGGAAGCCATCCACACTCTTTTCGGCTCAGCTGGATC
 TCCCCAAACACACCATCATCAAGTTCTTCCAGAACCAGCGGTACCACGTGAAGCACACGGGAAGCTGAA
 AGAGCACCTGGGCTCCGCGGTGGACGTGGCTGAATATAAGGACGAGGAGCTGCTGACCGAGTCAGAGGAG
 AACGACAGCGAGGAAGGCTCCGAGGAGATGTACAAAGTGGAGGCTGAGGAGGAAAATGCTGACAAAAGCA
 AGGCAGCACCTGCCGAAATTGACCAGAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216909 representing NM_015265
 Red=Cloning site Green=Tags(s)

MERRSESPCLRDSPDRRSGSPDVKGPPPVKVARLEQNGSPMGARGRPNGAVAKAVGGLMIPVFCVVEQLD
 GSLEYDNREEHAFLVLRKDVLFSQLVETALLALGYSHSSAAQAQGI IKLGRWNPLPLSYVTDAPDATVA
 DMLQDVYHVVTLKIQQLQSCSKLEDLPAEQWNHATVRNALKELLKEMNQSTLAKECPLSQSMISSIVNSTY
 YANVSATKCQEFGRWYKKYKKIKVERVERENLSDYCVLGQRPMHLPNMNQLASLGKTNQSPHSQIHHST
 PIRNQVPALQPI MSPGLLSPQLSPQLVRQIAMAHLINQQIAVSRLLAHQHPQAINQQFLNHPPIPRAVK
 PEPTNSSVEVSPDIYQQVRDELKRASVSQAVFARVAFNRQTQGLLSEILRKEEDPRTASQSLLVNLRAMQN
 FLNLPEVERDRIYQDERERSMNPVSMVSSASSPSSSRTPQAKTSTPTDLPIKVDGANINITAAIYDE
 IQQEMKRAKVSQALFAKVAANKSQGWLCELLRWKENPSPENRTLWENLCTIRRFLNLPQHERDVIYEEES
 RHHHSERMQHVVQLPPEPVQVLRHQSSQPAKESPPREEAPPPPTEDSCAKKPRSRTKISLEALGILQ
 SFIHDVGLYPDQEAHTLSAQLDLPKHTIIKFFQNRQYHVKHHGKLEHLGSAVDVAEYKDEELLTESEE
 NDSEEGSEEMYKVEAEEENADKSKAAPAEIDQR

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2916_h09.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



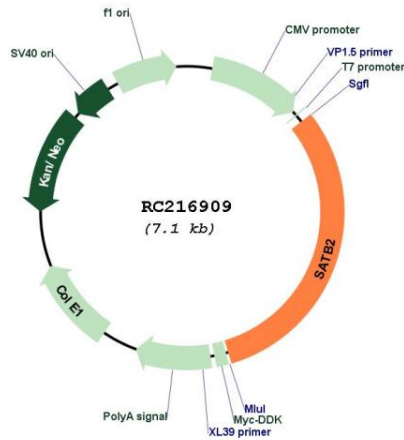
* The last codon before the Stop codon of the ORF

ACCN: NM_015265

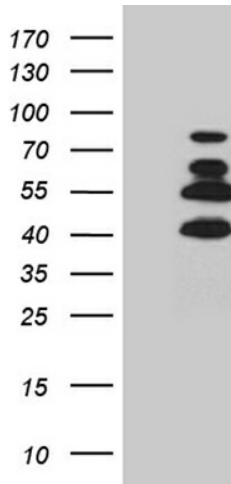
ORF Size: 2199 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
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.
Note:	<p>Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.</p>
RefSeq:	NM_015265.4
RefSeq Size:	4999 bp
RefSeq ORF:	2202 bp
Locus ID:	23314
UniProt ID:	Q9UPW6
Cytogenetics:	2q33.1
Protein Families:	Transcription Factors
MW:	82.4 kDa
Gene Summary:	<p>This gene encodes a DNA binding protein that specifically binds nuclear matrix attachment regions. The encoded protein is involved in transcription regulation and chromatin remodeling. Defects in this gene are associated with isolated cleft palate and cognitive disability. Alternate splicing results in multiple transcript variants that encode the same protein. [provided by RefSeq, Feb 2010]</p>

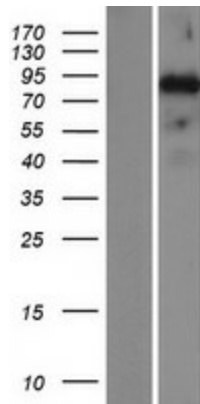
Product images:



Circular map for RC216909



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SATB2 (Cat# RC216909, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SATB2 (Cat# [TA800843])(1:2000). Positive lysates [LY414656] (100ug) and [LC414656] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY414656]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216909 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).