

Product datasheet for **RG230466**

SATB2 (NM_001172509) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SATB2 (NM_001172509) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SATB2
Synonyms:	GLSS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG230466 representing NM_001172509
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGCGCGGGAGCGAGAGCCCGTGTCTGCGGGACAGCCCCGACCGCGGAGCGGCAGCCCGGACGTCA
 AGGGGCCCTCCCCAGTGAAGGTGGCCCGCTGGAGCAGAACGGCAGCCCCATGGGAGCCCGGGAGGCC
 CAACGGCGCCGTGGCCAAGGCCGTGGGAGTTTGTGATTCTGTCTTTTGTGTCGTGGAGCAGTTGGAC
 GGCTCTCTTGAATATGACAACAGAGAAGAACACGCCGAGTTTGTCTGGTGCAGAAAGATGTGCTTTTAA
 GCCAGCTGGTGGAGACTGCGCTCCTGGCCCTGGGGTATTCTCACAGCTCTGCGGCCAGGCCCAAGGAAT
 AATCAAGCTGGGAAGGTGGAACCCTCTCCCTCAGTTATGTGACAGATGCACCCGACGCGCAGCTGGCC
 GACATGCTACAAGATGTCTATCATGTTGTGACGTTGAAAATCCAATTACAAAGTTGTTCAAAGTTGGAAG
 ACTTGCCCTGCGGAGCAGTGAACCATGCCACAGTCGCAATGCCTTAAAGGAAGTCTCAAAGAGATGAA
 CCAGAGCACATTAGCCAAAGAATGCCCTCTCTCCAGAGTATGATTTTATCCATTGTAATAGCACATAT
 TATGCCAATGTGTGAGCAACCAAGTCCAGGAGTTGGGAGATGGTATAAAAAGTACAAGAAGATTAAGG
 TGGAAAGAGTGGAAACGAGAAAACCTTTCAGACTATTGTGTTCTGGGCCAGCGTCCAATGCATTTACCAAA
 TATGAACCAGCTGGCATCCCTGGGGAAAACCAACGAACAGTCTCCTCACAGCCAAATTCACCACAGTACT
 CCAATCCGAAACCAAGTCCCGCATTACAGCCCATCATGAGCCCTGGTCTTCTTCTCCCGAGCTTAGTC
 CACAACCTGTAAGGCAACAAATAGCCATGGCCCATCTGATAAACCAACAGATTGCCGTTAGCCGGCTCCT
 GGCTCACAGCATCCTCAAGCCATCAACCAGCAGTTCTGAAACCATCCACCCATCCCAGAGCAGTTAAG
 CCAGCCCAACCAACTCTTCCGTGGAAGTCTCTCCAGATATCTACCAGCAAGTCAAGATGAGCTGAAGA
 GGGCCAGTGTGTCCCAAGCTGTCTTTGCAAGAGTGGCATTCAACCGCACACAGGGATTGTTGTCTGAGAT
 TCTGCGTAAGGAAGAAGACCCTCGACAGCCTCTCAGTCTTCTAGTAAACCTGAGGGCCATGCAGAAT
 TTCTCAATCTGCCAGAAGTGGAGCGAGATCGCATCTACCAGGATGAGAGGGAGCGGAGCATGAATCCCA
 ATGTGAGCATGGTCTCCTCGGCCTCCAGCAGTCCAGCTCCTCCCGAACCCCTCAGGCCAAAACCTCGAC
 ACCGACAACAGACCTCCCTATTAAGGTGGACGGCGCCAACATCAACATCACAGCTGCCATTTATGACGAG
 ATCCAACAGGAGATGAAAAGGGCCAAGGTGTCTCAAGCCCTGTTGCCAAAGTGGCTGCAATAAAAAGTC
 AGGGCTGGCTGTGTGAAGTCTCCGCTGGAAGGAGAACCAAGCCAGAAAACCGCACCCCTCTGGGAAAA
 CCTCTGTACCATCCGTCGCTTCTGAACCTTCCCAGCATGAGAGGGATGTCATCTATGAGGAGGAGTCA
 AGGCATCACACAGCGAACGCATGCAACACGTGGTCCAGCTTCCCCTGAGCCGTTGCAGTACTTCATA
 GACAGCAGTCTCAGCCAGCCAAGGAGAGTTCCCTCCCAGAGAAGAAGCGCCTCCCCACCTCCTCCGAC
 TGAAGACAGTTGTGCCAAAAGCCCGGTCTCGCACAAAAGATCTCCTTAGAAGCCCTGGGGATCCTCCAA
 AGCTTTATTATGATGTAGGCCTGTACCAGACCAGGAAGCCATCCACACTCTTTCGGCTCAGCTGGATC
 TCCCCAAACACACCATCATCAAGTTCTTCCAGAACCAGCGGTACCACGTGAAGCACACGGGAAGCTGAA
 AGAGCACCTGGGCTCCGCGGTGGACGTGGCTGAATATAAGGACGAGGAGCTGCTGACCGAGTCAGAGGAG
 AACGACAGCGAGGAAGGCTCCGAGGAGATGTACAAAGTGGAGGCTGAGGAGGAAAATGCTGACAAAAGCA
 AGGCAGCACCTGCCGAAATTGACCAGAGA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG230466 representing NM_001172509
 Red=Cloning site Green=Tags(s)

MERRSESPCLRDSPDRRSGSPDVKGPPPVKVARLEQNGSPMGARGRPNNGAVAKAVGGLMIPVFCVVEQLD
 GSLEYDNREEHAFLVLRKDVLFSQLVETALLALGYSHSSAAQAQGI IKLGRWNPLPLSYVTDAPDATVA
 DMLQDVYHVVTLKIQLQSCSKLEDLPAEQWNHATVRNALKELLKEMNQSTLAKECPLSQSMISSIVNSTY
 YANVSATKCQEFGRWYKYYKKIKVERVERENSDYCVLGQRPMHLPNMNQLASLGKNEQSPHSQIHHST
 PIRNQVPALQPI MSPGLLSPQLSPQLVRQIAMAHLINQQIAVSRLLAHQHPQAINQQFLNHPPIPRAVK
 PEPTNSSVEVSPDIYQQVRDELKRASVSQAVFARVAFNRQTQGLLSEILRKEEDPRTASQSLLVNLAMQN
 FLNLPEVERDRIYQDERERSMNPVSMVSSASSPSSSRTPQAKTSTPTDLPIKVDGANINITAAIYDE
 IQQEMKRAKVSQALFAKVAANKSQGWCELLRWKENPSPENRTLWENLCTIRRFLNLPQHERDVIYEEES
 RHHHSERMQHVVQLPPEPVQVLRHQSSQPAKESPPREEAPPPPTEDSCAKKPRSRTKISLEALGILQ
 SFIHVDVGLYPDQEAHTLSAQLDLPKHTIIKFFQNRQYHVKHHGKLEHLGSAVDVAEYKDEELLTESEE
 NDSEEGSEEMYKVEAEEENADKSKAAPAEIDQR

TRTRPLE - GFP Tag - V

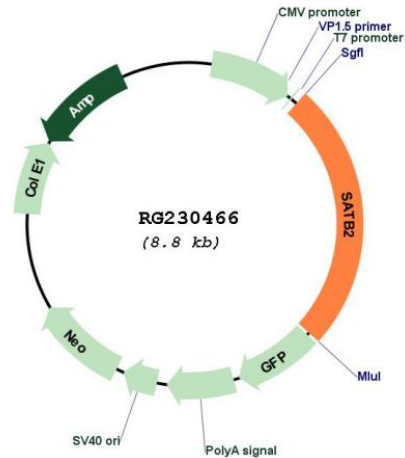
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001172509

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_001172509.2](#)

RefSeq Size: 5730 bp

RefSeq ORF: 2202 bp

Locus ID: 23314

UniProt ID: [Q9UPW6](#)

Cytogenetics: 2q33.1

Protein Families: Transcription Factors

Gene Summary: 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]