

## Product datasheet for **RG209183**

### **SREBP1 (SREBF1) (NM\_001005291) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SREBP1 (SREBF1) (NM_001005291) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SREBP1
Synonyms:	bHLHd1; HMD; IFAP2; SREBP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209183 representing NM_001005291 Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GGCGCGCC**

ATGGACGAGCCACCCTTCAGCGAGGCGGCTTTGGAGCAGGCGCTGGGCGAGCCGTGCGATCTGGACGCGG  
CGCTGCTGACCGACATCGAAGGTGAAGTCGGCGCGGGGAGGGGTAGGGCCAACGGCCTGGACGCCCAAG  
GGCGGGCGCAGATCGCGGAGCCATGGATTGCACTTTGAAGACATGCTTCAGCTTATCAACAACCAAGAC  
AGTGACTCCCTGGCCTATTTGACCCACCCTATGCTGGGAGTGGGCGAGGGGCACAGACCCTGCCAGCC  
CCGATACCAGCTCCCAGGCAGCTTGTCTCCACCTCCTGCCACATTGAGCTCCTCTTTGAAGCCTTCT  
GAGCGGGCCGAGGCAGCGCCCTCACCCCTGTCCCTCCCAGCCTGCACCCACTCCATTGAAGATGTAC  
CCGTCCATGCCCGCTTTCTCCCTGGGCTGGTATCAAGGAAGAGTCAGTGCCACTGAGCATCTGCAGA  
CCCCACCCACAGCCCTGCCAGGGGCCCTCCTGCCACAGAGCTTCCCAGCCCCAGCCCCACCGCAGTT  
CAGCTCCACCCCTGTGTTAGGCTACCCAGCCCTCCGGGAGGCTTCTCTACAGGAAGCCCTCCCGGGAAC  
ACCCAGCAGCCGCTGCCTGGCTGCCACTGGCTTCCCGCCAGGGGTCCCGCCCTCTCCTTGCACACCC  
AGGTCCAGAGTGTGGTCCCCAGCAGTACTGACAGTACAGCTGCCCCACGGCAGCCCTGTAACGAC  
CACTGTGACCTCGCAGATCCAGCAGGTCCCGGTCTGCTGCAGCCCCACTTATCAAGGCAGACTCGTG  
CTTCTGACAGCCATGAAGACAGACGGAGCCACTGTGAAGGCGGCAGGTCTCAGTCCCCTGGTCTCTGGCA  
CCACTGTGCAGACAGGGCCTTTGCCGACCCTGGTGAAGTGGCGGAACCATCTTGGCAACAGTCCCCTGGT  
CGTAGATGCGGAGAAGCTGCCTATCAGCCGGCTCGCAGCTGGCAGCAAGGCCCGGCTCTGCCAGAGC  
CGTGGAGAGAAGCGCACAGCCACAACGCCATTGAGAAGCGCTACCGCTCCTCCATCAATGACAAAATCA  
TTGAGCTCAAGGATCTGGTGGTGGGCACTGAGGCAAGCTGAATAAATCTGCTGTCTTGCGAAGGCCAT  
CGACTACATTCGTTTCTGCAACACAGCAACCAGAACTCAAGCAGGAGAACCTAAGTCTGCGCACTGCT  
GTCCACAAAAGCAAATCTCTGAAGGATCTGGTGTGGCCTGTGGCAGTGGAGGGAACACAGAGCTGCTCA  
TGGAGGGCGTGAAGACTGAGGTGGAGGACACACTGACCCACCCCTCGGATGCTGGCTCACCTTTCCA  
GAGCAGCCCTTGTCCCTGGCAGCAGGGCAGTGGCAGCGGTGGCAGTGGCAGTGGCAGTGGCAGCTGAC



[View online >](#)

AGCCCAGTCTTTGAGGACAGCAAGGCAAAGCCAGAGCAGCGGCCGTCTCTGCACAGCCGGGGCATGCTGG  
ACCGCTCCCGCCTGGCCCTGTGCACGCTCGTCTTCTCTGCTGTCTGCAACCCCTTGGCCTCCTTGCT  
GGGGGCCCCGGGGCTTCCCAGCCCTCAGATACCACCAGCGTCTACCATAGCCCTGGGCGCAACGTGCTG  
GGCACCAGAGCAGAGATGGCCCTGGCTGGGCCAGTGGCTGCTGCCCCAGTGGTCTGGCTGCTCAATG  
GGCTGTTGGTGCCTCGTCTCCTTGGTGTCTCTTTGTCTACGGTGAGCCAGTACACGGCCCCACTCAGG  
CCCCGCCGTGACTTCTGGAGGCATCGCAAGCAGGCTGACCTGGACCTGGCCCGGGGAGACTTTGCCAG  
GCTGCCAGCAGCTGTGGCTGGCCCTGCGGGCACTGGGCCGGCCCTGCCACCTCCCACCTGGACCTGG  
CTTGATAGCCTCCTCTGGAACCTCATCCGTACCTGCTGCAGCGTCTCTGGGTGGGCCGCTGGCTGGCAGG  
CCGGGCAGGGGGCCTGCAGCAGGACTGTGCTCTGCGAGTGGATGCTAGGCCAGCGCCCGAGACGCAGCC  
CTGGTCTACCATAAGCTGCACCAGCTGCACACCATGGGGAAGCACACAGGCGGGCACCTCACTGCCACCA  
ACCTGGCGCTGAGTGCCCTGAACCTGGCAGAGTGTGCAGGGGATGCCGTGTCTGTGGCGACGCTGGCCGA  
GATCTATGTGGCGGCTGCATTGAGAGTGAAGACCAGTCTCCACGGGCCTTGCAATTTCTGACACGCTTC  
TTCTGAGCAGTGCCCGCAGGCCCTGCCTGGCACAGAGTGGCTCAGTGCCTCCTGCCATGCAGTGGCTCT  
GCCACCCCGTGGCCACCGTTTCTTCGTGGATGGGGACTGGTCCGTGCTCAGTACCCCATGGGAGAGCCT  
GTACAGCTTGGCCGGGAACCCAGTGGACCCCTGGCCAGGTGACTCAGCTATTCGGGAACATCTCTTA  
GAGCGAGCACTGAACTGTGTGACCCAGCCCAACCCAGCCCTGGGTGAGCTGATGGGGACAAGGAATTCT  
TGGATGCCCTCGGGTACCTGCAGCTGCTGAACAGCTGTTCTGATGCTGCGGGGGCTCCTGCCTACAGCTT  
CTCCATCAGTTCAGCATGGCCACCACCACCGCGTAGACCCGGTGGCCAAGTGGTGGGCCCTCTCTGACA  
GCTGTGGTGATCCACTGGCTGCGGCGGGATGAGGAGGCGGCTGAGCGGCTGTGCCCGCTGGTGGAGCACC  
TGCCCCGGGTGCTGCAGGAGTCTGAGAGACCCCTGCCAGGGCAGCTCTGCACTCCTTCAAGGCTGCCCC  
GGCCCTGCTGGGCTGTGCCAAGGCAGAGTCTGGTCCAGCCAGCCTGACCATCTGTGAGAAGGCCAGTGGG  
TACCTGCAGGACAGCCTGGCTACCACACCAGCCAGCAGTCCATTGACAAGGCCGTGCAGCTGTTCTGT  
GTGACCTGCTTCTTGTGGTGCGCACCCAGCCTGTGGCGGCAGCAGCAGCCCCGGCCCCGGCCCCAGCAGC  
CCAGGGCACCCAGCAGCAGGCCCCAGGCTTCCGCCCTTGAGCTGCGTGGCTTCCAACGGGACCTGAGCAGC  
CTGAGGCGGCTGGCACAGAGCTTCCGGCCGCCATGCGGAGGGTGTTCCTACATGAGGCCACGGCCCGGC  
TGATGGCGGGGGCCAGCCCCACACGGACACACCAGCTCCTCGACCGCAGTCTGAGGCGGCGGGCAGGCC  
CGGTGGCAAAGGAGGCGCGGTGGCGGAGCTGGAGCCGCGGCCACGCGGCGGGAGCAGCGGAGGCCTTG  
CTGCTGGCCTCCTGCTACCTGCCCCCGGCTTCTGTGCGGCGCCGGGCAGCGCTGGGCATGCTGGCTG  
AGGCGGCGCGCACACTCGAGAAGCTTGGCGATCGCCGGCTGCTGCACGACTGTCAGCAGATGCTCATGCG  
CCTGGGCGGTGGGACCACTGCACTTCCAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG209183 representing NM\_001005291  
 Red=Cloning site Green=Tags(s)

MDEPPFSEAALEQALGEPCLDAALLTDIEGEVAGRGRANGLDAPRAGADRGAMDCTFEDMLQLINNQD  
 SDFPGLFDPPIYAGSGAGGTDSPASPTSSPGSLSPPPATLSSSLEAFLSGPQAAPSPLSPPQPAPTPLKMY  
 PSMPAFSPGPGIKEESVPLSILQTPTPQLPGALLPQSFAPAPPQFSSTPVLGYPSPPGGFSTGSPGN  
 TQQPLPGLPLASPPGVPPVSLHTQVQSVVPQQLLTVTAAPTAAPVTTTTSQIQQVPLVLPHFQIKADSL  
 LLTAMKTDGATVKAAGLSPLVSGTTVQTGPLPTLVSGGITLATVPLVVD AEKLPISRLAAGSKAPASAQS  
 RGEKRTAHNAIEKRYRSSINDKIIELKDLVVGTEAKLNKSAVLRKAIDYIRFLQHSNQKQENLSLRTA  
 VHKSKSLKDLVSACSGGNTDVLMEGVKTEVEDTLTPPPSDAGSPFQSSPLSLGSRGSGSGGSDSEPD  
 SPVFEFSKAKPEQRPSLHSRGLDRSLALCTLVFLCLSCNPLASLLGARGPLPSPDTSVYHSPGRNVL  
 GTESRDGPGWAQWLLPPVVWLLNGLLVLSVLLFVYGEVTRPHSGPAVYFWRHRKQADLDLARGDFAQ  
 AAQQLWLALRALGRPLPTSHLDLACSLWNLIRHLLQRLWVGRWLAGRAGGLQQDCALRVDASASARDA  
 LVYHKLHQLHTMGKHTGGHLTATNLALSALNLAECAGDAVSVATLAEIYVAAALRVKTSRPRALHFLTRF  
 FLSSARQACLAQSGSVPPAMQWLCHPVGHRFFVDGDWSVLSTPWESLYSLAGNPVDPLAQVTQLFREHLL  
 ERALNCVTQPNPSPGSADGKDFLDALGYLQLLNSCSDAAGAPAYSFSSSSMATTGVDPVAKWWASLT  
 AVVIHWLRRDEEAERLCPLVEHLPRVLQESERPLPRAALHSFKAARALLGCAKAESGPASLTICEKASG  
 YLQDSLATTPASSIDKAVQLFLCDLLL VVRTSLWRQQPPAPAPAAQGTSSRPQASALELRGFQRDLSS  
 LRRLAQSRPAMRRVFLHEATARLMAGASPTRTHQLLDRSLRRRAGPGGKGGAVAELEPRPTRREHAEAL  
 LLASCYLPPGFSLAPGQVRVGMLEAARTLEKLGDRRLHDCQQMLMRLGGGTTVTSS

TRTRPLE - GFP Tag - V

**Restriction Sites:** AscI-MluI  
**Cloning Scheme:**



**ACCN:** NM\_001005291  
**ORF Size:** 3531 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](mailto: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\\_001005291.1](#), [NP\\_001005291.1](#)

**RefSeq Size:** 5012 bp

**RefSeq ORF:** 3534 bp

**Locus ID:** 6720

**UniProt ID:** [P36956](#)

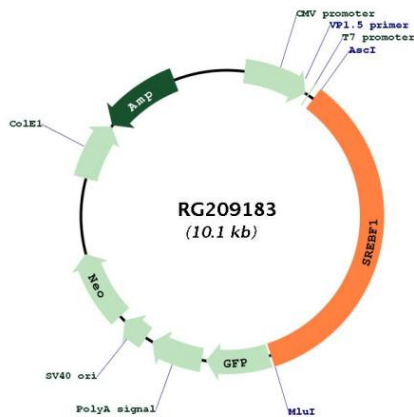
**Cytogenetics:** 17p11.2

**Protein Families:** Druggable Genome, Transcription Factors

**Protein Pathways:** Insulin signaling pathway

**Gene Summary:**

This gene encodes a basic helix-loop-helix-leucine zipper (bHLH-Zip) transcription factor that binds to the sterol regulatory element-1 (SRE1), which is a motif that is found in the promoter of the low density lipoprotein receptor gene and other genes involved in sterol biosynthesis. The encoded protein is synthesized as a precursor that is initially attached to the nuclear membrane and endoplasmic reticulum. Following cleavage, the mature protein translocates to the nucleus and activates transcription. This cleavage is inhibited by sterols. This gene is located within the Smith-Magenis syndrome region on chromosome 17. Alternative promoter usage and splicing result in multiple transcript variants, including SREBP-1a and SREBP-1c, which correspond to RefSeq transcript variants 2 and 3, respectively. [provided by RefSeq, Nov 2017]

**Product images:**


Circular map for RG209183