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 RC208404

SREBP1 (SREBF1) (NM_004176) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	SREBP1
Synonyms:	bHLHd1; HMD; IFAP2; SREBP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC208404 representing NM_004176
Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC
GCCC

ATGGACGAGCCACCCTTCAGCGAGGCGGCTTTGGAGCAGGCGCTGGGCGAGCCGTGCGATCTGGACGCGG
CGCTGCTGACCGACATCGAAGACATGCTTCAGCTTATCAACAACCAAGACAGTGACTTCCCTGGCCTATT
TGACCCACCCTATGCTGGGAGTGGGGCAGGGGGCACAGACCCTGCCAGCCCCGATACCAGCTCCCCAGGC
AGCTTGTCTCCACCTCCTGCCACATTGAGCTCCTCTCTTGAAGCCTTCCTGAGCGGGCCGCAGGCAGCGC
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CCCTGGGCCTGGTATCAAGGAAGAGTCAGTGCCACTGAGCATCCTGCAGACCCCCACCCCACAGCCCCTG
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CCTGCCACTGGCTTCCCCGCCAGGGGTCCCGCCCGTCTCCTTGCACACCCAGGTCCAGAGTGTGGTCCCC
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AGCAGGTCCCGGTCCTGCTGCAGCCCCACTTCATCAAGGCAGACTCGCTGCTTCTGACAGCCATGAAGAC
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GCCCCTCAGATACCACCAGCGTCTACCATAGCCCTGGGCGCAACGTGCTGGGCACCGAGAGCAGAGATGG

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CCCTGGCTGGGCCCAGTGGCTGCTGCCCCCAGTGGTCTGGCTGCTCAATGGGCTGTTGGTGCTCGTCTCC
TTGGTGCTTCTCTTTGTCTACGGTGAGCCAGTCACACGGCCCCACTCAGGCCCCGCCGTGTACTTCTGGA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>RC208404 representing NM_004176
Red=Cloning site Green=Tags(s)

MDEPPFSEAALEQALGEPCDLDAALLTDIEDMLQLINNQDSDFPGLFDPPYAGSGAGGTDPASPDTSSPG
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VEDTLTPPPSDAGSPFQSSPLSLGRRGSGSGGSGSDSEPDSPVFEDSKAKPEQRPSLHSRGMLDRSRLAL
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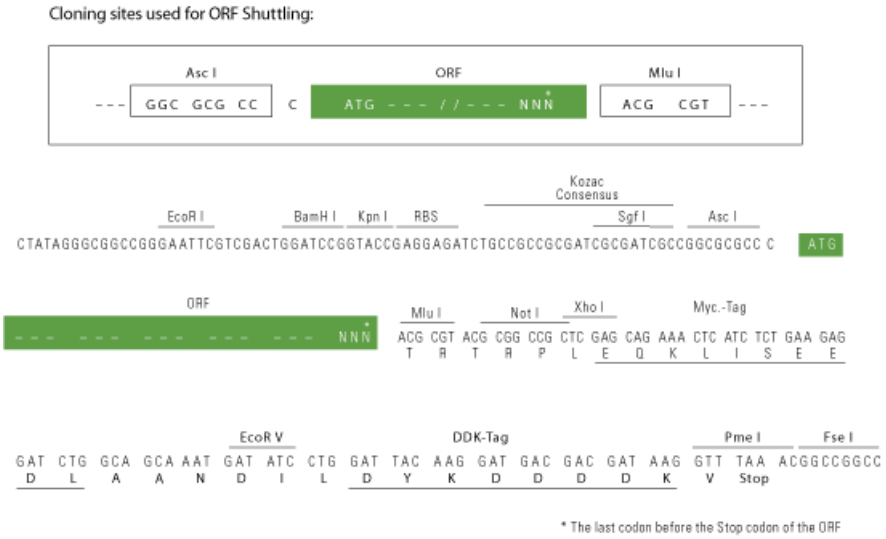
TRTHQLLDRSLRRRAGPGGKGGAVAELEPRPTRREHAEALLLASCYLPPGFLSAPGQRVGMLAEAARTLE
KLGDRRLLHDCQQMLMRLGGGTTVTSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2803_b01.zip

Restriction Sites: AscI-MluI

Cloning Scheme:



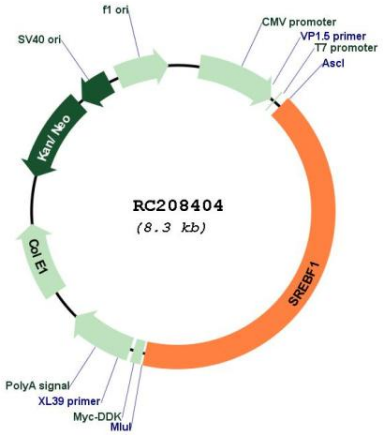
ACCN: NM_004176

ORF Size: 3441 bp

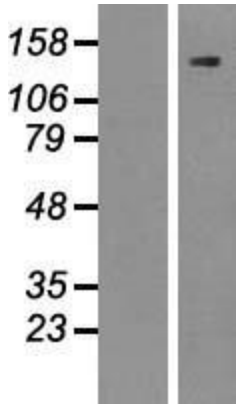
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004176.4
RefSeq Size:	4922 bp
RefSeq ORF:	3444 bp
Locus ID:	6720
UniProt ID:	P36956
Cytogenetics:	17p11.2
Domains:	HLH
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Insulin signaling pathway
MW:	122.2 kDa

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 cleaveage 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 RC208404



Western blot validation of overexpression lysate (Cat# [LY418165]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208404 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).