

Product datasheet for **RC204044**

SAT2 (NM_133491) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SAT2 (NM_133491) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: SAT2
Synonyms: SSAT2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC204044 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTCCGTGCGGATCCGAGAGGCCAAGGAGGGAGACTGTGGAGATATCCTGAGGCTGATTCGGGAGC
TAGCCGAATTCGAAAACTCTCGGATCAGGTGAAGATCAGTGAAGAAGCCCTGAGAGCAGATGGCTTTGG
AGACAATCCTTTCTACTGTTTGGTAGCAGAGATTCTCCAGCGCCCGGAAGCTACTGGGGCCCTGC
GTGGTGGGCTATGGATATACTATTTTCATCTACAGTACATGGAAGGACGCACCATTTATCTGGAGGATA
TCTATGTGATGCCGAATATCGGGTCAAGGGATTGGTCCAAAATAATCAAAAAGTGGCTGAGGTGGC
CTTGATAAAGGGCTGCTCCAATTCGCGCTGGCGTCTGGACTGGAACCAAGGGCCATGGACTTGATC
AAGGCCCTAGGAGCCCAAGATCTGACGGAAGCTGAGGGCTGGCACTTCTCTGCTTTCAAGGAGAGGCCAA
CGAGAAAGTTGGCAGGAAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204044 protein sequence
Red=Cloning site Green=Tags(s)

MASVRIREAKEGDCGDILRLIRELAEFEKLSQVYKISEEALRADFGDNPFIHCLVAEILPAPGKLLGPC
VVGYGIIYFIYSTWKGRITILEDIYVMPYRGGIGSKI IKKVAEVALDKGCSQFRLAVLDWNQRAMDLY
KALGAQDLTEAGWHFFCFQGEATRKLAK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

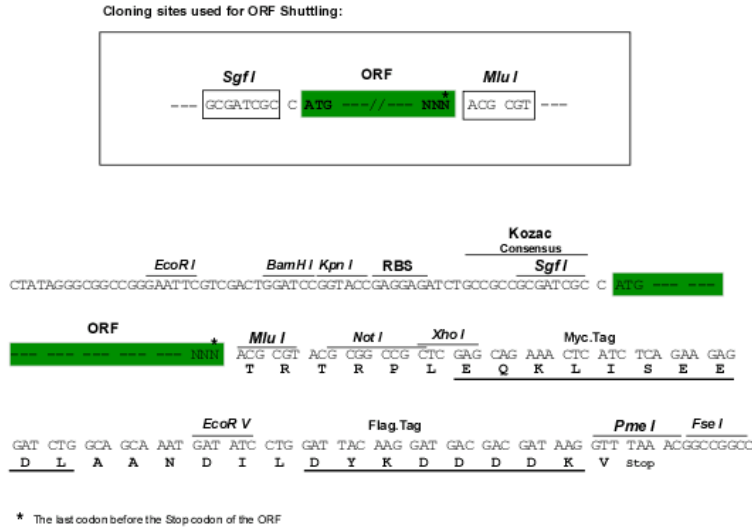
Chromatograms: https://cdn.origene.com/chromatograms/mk6423_b03.zip



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_133491

ORF Size: 510 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](#)

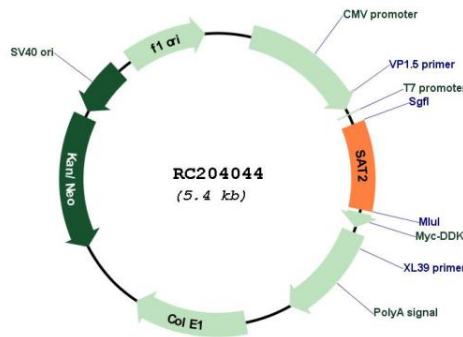
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

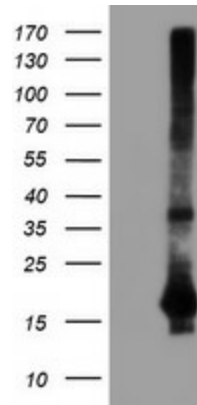
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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:	<u>NM_133491.5</u>
RefSeq Size:	983 bp
RefSeq ORF:	513 bp
Locus ID:	112483
UniProt ID:	<u>Q96F10</u>
Cytogenetics:	17p13.1
Domains:	Acetyltransf
Protein Pathways:	Arginine and proline metabolism, Metabolic pathways
MW:	19.2 kDa
Gene Summary:	Enzyme which catalyzes the acetylation of polyamines. Substrate specificity: norspermidine > spermidine = spermine >> N(1)acetylspermine = putrescine.[UniProtKB/Swiss-Prot Function]

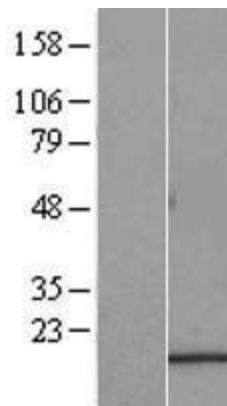
Product images:



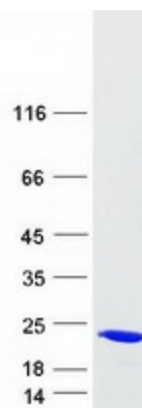
Circular map for RC204044



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SAT2 (Cat# RC204044, 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-SAT2 (Cat# [TA504633]). Positive lysates [LY408821] (100ug) and [LC408821] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY408821]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204044 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SAT2 protein (Cat# [TP304044]). The protein was produced from HEK293T cells transfected with SAT2 cDNA clone (Cat# RC204044) using MegaTran 2.0 (Cat# [TT210002]).