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# Product datasheet for RC210593

## SAR1B (NM_016103) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | SAR1B (NM_016103) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | SAR1B |
| **Synonyms:** | ANDD; CMRD; GTBPB; SARA2 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC210593 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCCTTCATATTTGATTGGATTTACAGTGGTTTCAGCAGTGTGCTACAGTTTTTAGGATTATATAAGA
AAACTGGTAAACTGGTATTTCTTGGATTGGATAATGCAGGAAAAACAACATTGCTACACATGCTAAAAGA
TGACAGACTTGGACAACATGTCCCAACATTACATCCCACTTCCGAAGAACTGACCATTGCTGGCATGACG
TTTACAACTTTTGATCTGGGTGGACATGTTCAAGCTCGAAGAGTGTGGAAAAACTACCTTCCTGCTATCA
ATGGCATTGTATTTCTGGTGGATTGTGCAGACCACGAAAGGCTGTTAGAGTCAAAAGAAGAACTTGATTC
ACTAATGACAGATGAAACCATTGCTAATGTGCCTATACTGATTCTTGGGAATAAGATCGACAGACCTGAA
GCCATCAGTGAAGAGAGGTTGCGAGAGATGTTTGGTTTATATGGTCAGACAACAGGAAAGGGGAGTATAT
CTCTGAAAGAACTGAATGCCCGACCCTTAGAAGTTTTCATGTGTAGTGTGCTCAAAAGACAAGGTTACGG
AGAAGGCTTCCGCTGGATGGCACAGTACATTGAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC210593 protein sequence
Red=Cloning site Green=Tags(s)

MSFIFDWIYSGFSSVLQFLGLYKKTGKLVFLGLDNAGKTTLLHMLKDDRLGQHVPTLHPTSEELTIAGMT
FTTFDLGGHVQARRVWKNYLPAINGIVFLVDCADHERLLESKEELDSLMTDETIANVPILILGNKIDRPE
AISEERLREMFGLYGQTTGKGSISLKELNARPLEVFMCSVLKRQGYGEGFRWMAQYID

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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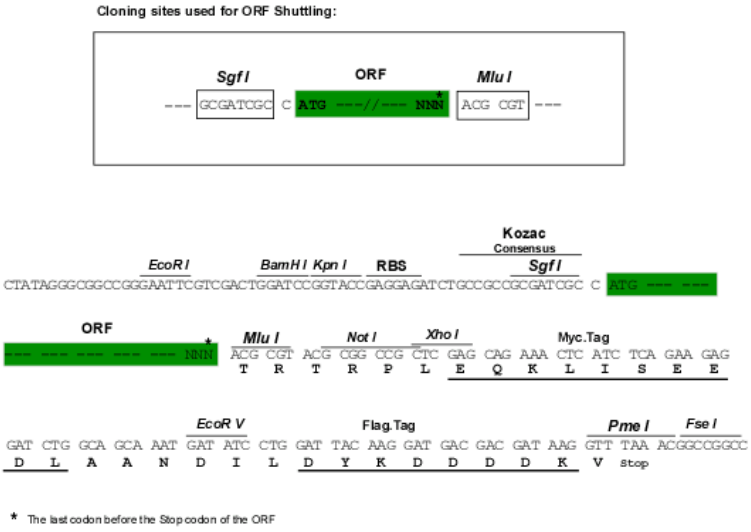
**Chromatograms:** https://cdn.origene.com/chromatograms/mk6001_f04.zip

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_016103

**ORF Size:** 594 bp

**OTI Disclaimer:** 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_016103.4

**RefSeq Size:** 6532 bp

**RefSeq ORF:** 597 bp

**Locus ID:** 51128

**UniProt ID:** Q9Y6B6

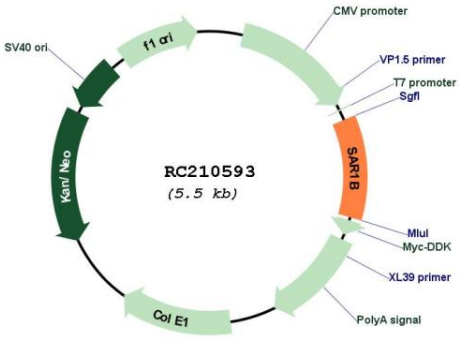
**Cytogenetics:** 5q31.1

**Domains:** SAR, ARF, arf

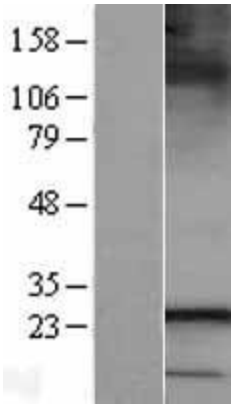
**MW:** 22.4 kDa

**Gene Summary:** The protein encoded by this gene is a small GTPase that acts as a homodimer. The encoded protein is activated by the guanine nucleotide exchange factor PREB and is involved in protein transport from the endoplasmic reticulum to the Golgi. This protein is part of the COPII coat complex. Defects in this gene are a cause of chylomicron retention disease (CMRD), also known as Anderson disease (ANDD). Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Mar 2010]

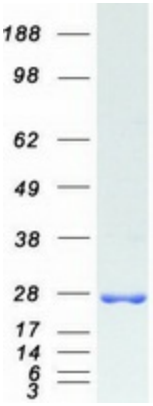
## Product images:




Circular map for RC210593




Western blot validation of overexpression lysate (Cat# [LY402500]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210593 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).




Coomassie blue staining of purified SAR1B protein (Cat# [TP310593]). The protein was produced from HEK293T cells transfected with SAR1B cDNA clone (Cat# RC210593) using MegaTran 2.0 (Cat# [TT210002]).