

## Product datasheet for **RC208964**

### Shwachman Bodian Diamond syndrome (SBDS) (NM\_016038) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Shwachman Bodian Diamond syndrome (SBDS) (NM_016038) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Shwachman Bodian Diamond syndrome
Synonyms:	CGI-97; SDO1; SDS; SWDS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208964 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCGATCTTCACCCCCACCAACCAGATCCGCCTAACCAATGTGGCCGTGGTACGGATGAAGCGTGCCG  
 GGAAGCGCTTCGAAATCGCCTGCTACAAAACAAGGTCGTCGGCTGGCGGAGCGGCGTGAAAAAGACCT  
 CGATGAAGTTCTGCAGACCCACTCAGTGTGTAAATGTTCTAAAGGTCAGGTTGCCAAAAGGAAGAT  
 CTCATCAGTGCCTTTGGAACAGATGACCAAACTGAAATCTGTAAGCAGATTTTGACTAAAGGAGAAGTTC  
 AAGTATCAGATAAAGAAAGACACACAACCTGGAGCAGATGTTTAGGGACATTGCAACTATTGTGCAGAG  
 CAAATGTGTGAATCCTGAAACAAAGAGACCATACACCGTGATCCTTATTGAGAGAGCCATGAAGGACATC  
 CACTATTCGGTGAAAACCAACAAGAGTACAAAACAGCAGGCTTTGGAAGTGATAAAGCAGTTAAAGAGA  
 AAATGAAGATAGAACGTGCTCACATGAGGCTTCGGTTCATCCTCCAGTCAATGAAGGCAAGAAGCTGAA  
 AGAAAAGCTCAAGCCACTGATCAAGGTCATAGAAAGTGAAGATTATGGCCAACAGTTAGAAATCGTATGT  
 CTGATTGACCCGGGCTGCTTCGAGAAATTGATGAGCTAATAAAAAAGGAACTAAAGGCAAGGTTCTT  
 TGAAGTACTCAATCTGAAAGATGTAGAAGAAGGAGATGAGAAATTTGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA


[View online »](#)

**Protein Sequence:** >RC208964 protein sequence  
 Red=Cloning site Green=Tags(s)

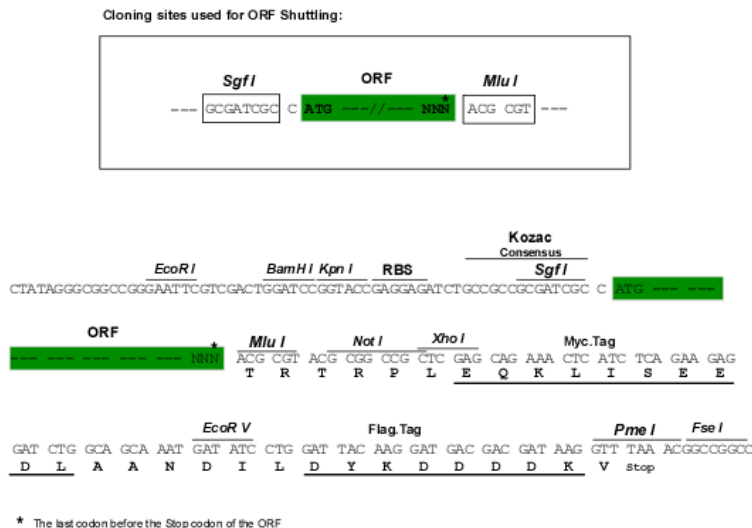
MSIFTPTNQIRLTNAVVRMKRAGKRFEIACYKNKVVGWRSGVEKDLDEVLQTHSVFVNVSKGQVAKKED  
 LISAFGTDQTEICKQILTKGEVQVSDKERHTQLEQMFRDIATIVADKCVNPETKRPYTVILIERAMKDI  
 HYSVTKNKKSTKQQALEVIKQLKEKMKIERAHMRLRILPVIATGNEGKKLKEKLKPLIKVIESEDYGQQLEIVC  
 LIDPGCFREIDELIKKETGKGSLEVLNLKDVEEGDEKEFE

TRTRPLEOKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6087\\_h10.zip](https://cdn.origene.com/chromatograms/mk6087_h10.zip)

Restriction Sites: Sgfl-MluI

### Cloning Scheme:



ACCN: NM 016038

ORF Size: 750 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_016038.4](#)

**RefSeq Size:** 1605 bp

**RefSeq ORF:** 753 bp

**Locus ID:** 51119

**UniProt ID:** [Q9Y3A5](#)

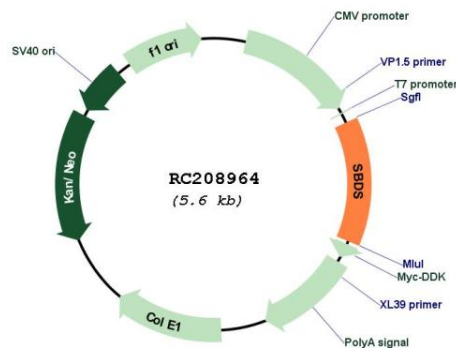
**Cytogenetics:** 7q11.21

**Domains:** UPF0023

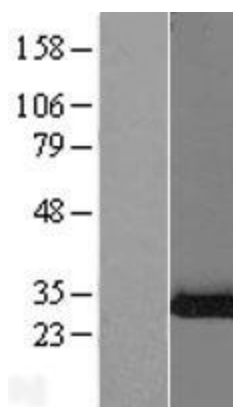
**MW:** 28.8 kDa

**Gene Summary:** This gene encodes a highly conserved protein that plays an essential role in ribosome biogenesis. The encoded protein interacts with elongation factor-like GTPase 1 to disassociate eukaryotic initiation factor 6 from the late cytoplasmic pre-60S ribosomal subunit allowing assembly of the 80S subunit. Mutations within this gene are associated with the autosomal recessive disorder Shwachman-Bodian-Diamond syndrome. This gene has a closely linked pseudogene that is distally located. [provided by RefSeq, Jan 2017]

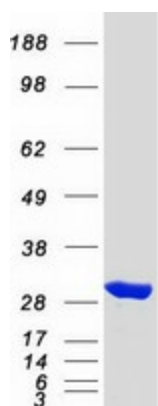
## Product images:



Circular map for RC208964



Western blot validation of overexpression lysate (Cat# [LY414234]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208964 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SBDS protein (Cat# [TP308964]). The protein was produced from HEK293T cells transfected with SBDS cDNA clone (Cat# RC208964) using MegaTran 2.0 (Cat# [TT210002]).