

### KD-Validated Anti-SBDS Ribosome MatuRation Factor Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1373

### **Specification**

# **KD-Validated Anti-SBDS Ribosome MatuRation Factor Rabbit Monoclonal Antibody - Product Information**

Application WB, FC, ICC Primary Accession O9Y3A5

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 29 kDa; observed, 29 kDa KDa

Gene Name SBDS

Aliases SBDS; SBDS Ribosome Maturation Factor;

CGI-97; SWDS; SDO1; SDS; SBDS,

Ribosome Assembly Guanine Nucleotide Exchange Factor; Ribosome Maturation

Protein SBDS; FLJ10917;

Shwachman-Bodian-Diamond Syndrome Protein; Shwachman-Bodian-Diamond

**Syndrome** 

Immunogen A synthesized peptide derived from human

**SBDS** 

# KD-Validated Anti-SBDS Ribosome MatuRation Factor Rabbit Monoclonal Antibody - Additional Information

Gene ID 51119

**Other Names** 

Ribosome maturation protein SBDS, Shwachman-Bodian-Diamond syndrome protein, SBDS

# **KD-Validated Anti-SBDS Ribosome MatuRation Factor Rabbit Monoclonal Antibody - Protein Information**

#### **Name SBDS**

#### **Function**

Required for the assembly of mature ribosomes and ribosome biogenesis. Together with EFL1, triggers the GTP-dependent release of EIF6 from 60S pre-ribosomes in the cytoplasm, thereby activating ribosomes for translation competence by allowing 80S ribosome assembly and facilitating EIF6 recycling to the nucleus, where it is required for 60S rRNA processing and nuclear export. Required for normal levels of protein synthesis. May play a role in cellular stress resistance. May play a role in cellular response to DNA damage. May play a role in cell proliferation.

#### **Cellular Location**

Cytoplasm. Nucleus, nucleolus. Nucleus, nucleoplasm. Cytoplasm, cytoskeleton, spindle.





Note=Primarily detected in the cytoplasm, and at low levels in nucleus and nucleolus (PubMed:17475909, PubMed:19602484). Detected in the nucleolus during G1 and G2 phase of the cell cycle, and diffusely distributed in the nucleus during S phase. Detected at the mitotic spindle. Colocalizes with the microtubule organizing center during interphase (PubMed:19759903).

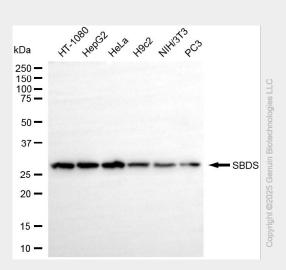
**Tissue Location** Widely expressed.

# **KD-Validated Anti-SBDS Ribosome MatuRation Factor Rabbit Monoclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

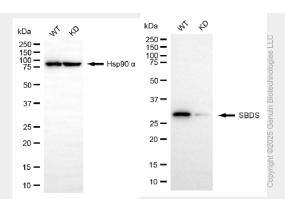
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### KD-Validated Anti-SBDS Ribosome MatuRation Factor Rabbit Monoclonal Antibody - Images

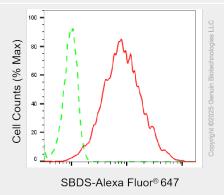


Western blotting analysis using anti-SBDS antibody (Cat#AGI1373). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-SBDS antibody (Cat#AGI1373, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

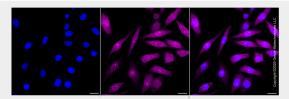




Western blotting analysis using anti-SBDS antibody (Cat#AGI1373). SBDS expression in wild-type (WT) and SBDS knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-SBDS antibody (Cat#AGI1373, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of SBDS expression in HepG2 cells using anti-SBDS antibody (Cat#AGI1373, 1:2,000). Green, isotype control; red, SBDS.



Immunocytochemical staining of HepG2 cells with anti-SBDS antibody (Cat#AGI1373, 1:1,000). Nuclei were stained blue with DAPI; SBDS was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar,  $20~\mu m$ .