# abcam

## Product datasheet

## Recombinant Human SBDS protein ab99957

## 1 Image

**Description** 

Product name Recombinant Human SBDS protein

Purity > 95 % SDS-PAGE.

ab99957 is purified using conventional chromatography techniques.

**Expression system** Escherichia coli

Accession Q9Y3A5

Protein length Full length protein

Animal free No

**Nature** Recombinant

**Species** Human

Sequence MGSSHHHHHHSSGLVPRGSHMSIFTPTNQIRLTNVAVVR

MKRAGKRFEIA

CYKNKVVGWRSGVEKDLDEVLQTHSVFVNVSKGQVAKK

**EDLISAFGTDDQ** 

TEICKQILTKGEVQVSDKERHTQLEQMFRDIATIVADKCVN

**PETKRPYTV** 

ILIERAMKDIHYSVKTNKSTKQQALEVIKQLKEKMKIERAHM

**RLRFILPV** 

NEGKKLKEKLKPLIKVIESEDYGQQLEIVCLIDPGCFREIDE

LIKKETKG KGSLEVLNLKDVEEGDEKFE

Predicted molecular weight 31 kDa including tags

Amino acids 1 to 250

Tags His tag N-Terminus

## **Specifications**

Our Abpromise guarantee covers the use of ab99957 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Mass Spectrometry

Mass spectrometry MALDI-TOF

Form Liquid

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## **Preparation and Storage**

## Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

pH: 8.00

Constituents: 0.0308% DTT, 0.316% Tris HCI, 0.00292% EDTA, 20% Glycerol (glycerin,

glycerine), 0.29% Sodium chloride

## **General Info**

#### **Function**

Required for the assembly of mature ribosomes and ribosome biogenesis. Together with EFTUD1, 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.

## Tissue specificity

Widely expressed.

#### Involvement in disease

Defects in SBDS are the cause of Shwachman-Diamond syndrome (SDS) [MIM:260400]. SDS is an autosomal recessive disorder characterized by pancreatic exocrine insufficiency, hematologic dysfunction, and skeletal abnormalities.

## Sequence similarities

Belongs to the SDO1/SBDS family.

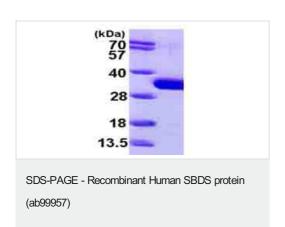
## **Cellular localization**

Cytoplasm. Nucleus > nucleolus. Nucleus > nucleoplasm. Cytoplasm > cytoskeleton > spindle. Primarily detected in the cytoplasm, and at low levels in nucleus and nucleolus

(PubMed:19602484 and PubMed:17475909). 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.

## **Images**



15% SDS-PAGE showing ab99957 (3 $\mu$ g).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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