

# Product information

## SMS, 1-366aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP1358

**Full name:** Spermine synthase

**NCBI Accession No.:** NP\_004586

**Synonyms:** MRSR, SPMSY, SpS, SRS

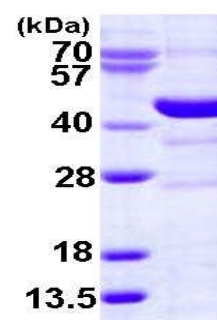
**Description:** SMS (Spermine synthase) belongs to the spermidine/spermine synthase family. It is an enzyme that converts spermidine into spermine. This enzyme is required for normal viability, growth and fertility involved in polyamine metabolism. Defects in SMS are the cause of Snyder-Robinson syndrome (SRS), also known as X-linked mental retardation Snyder-Robinson type. SRS is characterized by moderate intellectual deficit, hypotonia, an unsteady gait, osteoporosis, kyphoscoliosis and facial asymmetry. Transmission is X-linked recessive. Recombinant human SMS protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

**Form:** Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 100mM NaCl

**Molecular Weight:** 43.8kDa (390aa), confirmed by MALDI-TOF

**Purity:** > 90% by SDS - PAGE

**Concentration:** 1mg/ml (determined by Bradford assay)



15% SDS-PAGE (3ug)

### Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MGSMAAARH STLDFMLGAK ADGETILKGL QSIFQEQQMA ESVHTWQDHG YLATYTNKNG SFANLRIYPH  
 GLVLLDLQSY DGDAQGKEEI DSILNKVEER MKELSQDSTG RVKRLPPIVR GGAIDRYWPT ADGRLVEYDI DEVVYDEDSP YQNIKILHSK  
 QFGNIIILSG DVNLAESDLA YTRAIMGSGK EDYTGKDVLI LGGGDDGILC EIVKLPKPMV TMVEIDQMVI DGCKYMRKT CGDVLNLLKG  
 DCYQVLI EDC IPVLKRYAKE GREFDYVIND LTAVPISTSP EEDSTWEFLR LILDLSMKVL KQDGKYFTQG NCVNLTEALS LYEEQLGRLY  
 CPVEFSKEIV CVPSYLELWV FYTVWKKAKP

### General references:

Cason A.L., *et al.* (2003) *Eur. J. Hum. Genet.* 11:937-944

Sowell J, *et al.* (2011) *Clin Chim Acta.* 18;412(7-8):655-60.

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**