

Recombinant human Spermine synthase/SMS protein

Catalog Number: ATGP1358

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-366aa

UniProt No.

P52788

NCBI Accession No.

NP_004586.2

Alternative Names

Spermine synthase, MRSR, SPMSY, SpS, SRS

PRODUCT SPECIFICATION

Molecular Weight

43.8 kDa (390aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

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

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

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

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chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGSH>MAAARH STLDFMLGAK ADGETILKGL QSIFQEQGMA ESVHTWQDHG
YLATYTNKNG SFANLRIYPH GLVLLDLQSY DGDAQGKEEI DSILNKVEER MKELSQDSTG RVKRLPIVIR GGAIIDRYWPT
ADGRLVEYDI DEVVYDEDSP YQNIKILHSK QFGNILILSG DVNLAESDLA YTRAIMGSGK EDYTGKDVLI LGGDGGILC
EIVKLPKMV TMVEIDQMVI DGCKKYMRTK CGDVLDNLKG DCYQVLIEDC IPVLKRYAKE GREFDYVIND LTAVPISTSP
EEDSTWEFLR LILDLSMKVL KQDGKYFTQG NCVNLTEALS LYEEQLGRLY CPVEFSKEIV CVPSYLELWV FYTVWKKAKP

General References

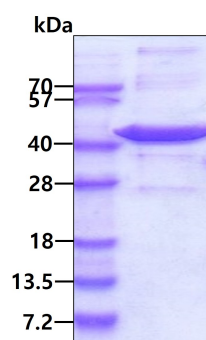
Cason A.L., et al. (2003) Eur. J. Hum. Genet. 11:937-944

Sowell J, et al. (2011) Clin Chim Acta. 18

412(7-8):655-60.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.