

Instruction manual FOR RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

SMS, 1-366aa, Human, His tag, E.coli

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3th Edition

Synonyms: Spermine synthase, 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

Sequences:

MGSSHHHHHHSSGLVPRGSHMGSHMAAARHSTLDFMLGAKADGETILKGLQSIFQEQGMAESVHTWQDHGYLAT YTNKNGSFANLRIYPHGLVLLDLQSYDGDAQGKEEIDSILNKVEERMKELSQDSTGRVKRLPPIVRGGAIDRYWPTA DGRLVEYDIDEVVYDEDSPYQNIKILHSKQFGNILILSGDVNLAESDLAYTRAIMGSGKEDYTGKDVLILGGGDGGILC EIVKLKPKMVTMVEIDQMVIDGCKKYMRKTCGDVLDNLKGDCYQVLIEDCIPVLKRYAKEGREFDYVINDLTAVPIST SPEEDSTWEFLRLILDLSMKVLKQDGKYFTQGNCVNLTEALSLYEEQLGRLYCPVEFSKEIVCVPSYLELWVFYTVW KKAKP

Purity:> 95% by HPLC

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

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

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.

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