重组人SMD1蛋白

Recombinant SMD1 protein (His tag)

目录号 Catalog Number	537898
同用名 Synonyms	Sm-D1; Sm-D autoantigen; snRNP core protein D1
种属 Species	Human
表达系统 Expression System	E. coli
蛋白编号 Accession	P62314
分子量 Molecular Weight	Predictes a molecular mass of 11.46 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

产品信息

氨基酸序列 Amino Acid Sequence	MNHKVHHHHH HGGSMKLVRF LMKLSHETVT IELKNGTQVH GTITGVDVSM NTHLKAVKMT LKNREPVQLE TLSIRGNNIR YFILPDSLPL DTLLVDVEPK V
性状 Form	冻干粉末 Lyophilized powder
组分 Formulation	Lyophilized from sterile 25 mM HEPES, 20 mM NaCl, pH 8.0
纯度 Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
内毒素 Endotoxin	Not tested.
活性 Activity	Not tested.
稳定性 Stability	Samples are stable for up to twelve months from date of receipt at -70℃
蛋白构建 Protein Construction	DNA encoding 1-87 aa (P62314) were fused with N-terminal 6His tag.

保存与运输

复溶 Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
储存 Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
运输 Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

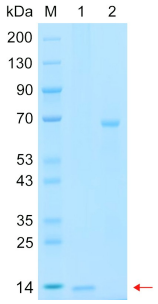
功能描述

研究背景 Background

Recombinant Human Small nuclear ribonucleoprotein Sm D1 (Sm-D1) Fragment (residues 1-87) is a high-purity protein designed for studying spliceosome assembly and pre-mRNA splicing mechanisms. This fragment fully encompasses the functional Sm domain, making it an ideal tool for investigating domain-specific interactions in snRNP complexes.
Small nuclear ribonucleoprotein Sm D1 (SNRPD1) serves as a core component of spliceosomal U1, U2, U4, and U5 small nuclear ribonucleoproteins (snRNPs), which are fundamental building blocks of the spliceosome. It participates in both the pre-catalytic B complex and activated C complex stages of spliceosome assembly and is also involved in the minor spliceosome for U12-type intron splicing. The protein may function as a charged scaffold that promotes snRNP assembly and strengthens snRNP-snRNP interactions through electrostatic contacts with RNA. Cellular localization studies show Sm-D1 is initially assembled in the cytosol before being transported to the nucleus via S

验证数据

SDS-PAGE



Recombinant SMD1 protein (His tag) SDS-PAGE
M: Marker; Lane 1: SMD1; Lane 2: BSA