

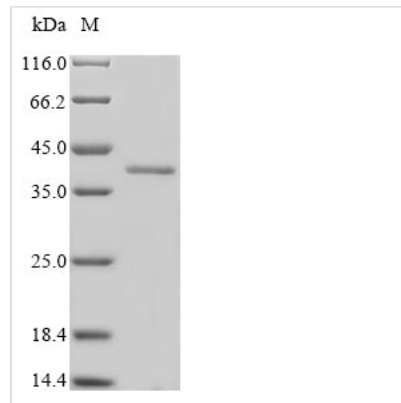


Recombinant Mouse Survival motor neuron protein(Smn1)

Product Code	CSB-MP021838MO
Relevance	The SMN complex plays a catalyst role in the assembly of small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome. Thereby, plays an important role in the splicing of cellular pre-mRNAs. Most spliceosomal snRNPs contain a common set of Sm proteins SNRPB, SNRPD1, SNRPD2, SNRPD3, SNRPE, SNRPF and SNRPG that assemble in a heptameric protein ring on the Sm site of the small nuclear RNA to form the core snRNP. In the cytosol, the Sm proteins SNRPD1, SNRPD2, SNRPE, SNRPF and SNRPG are trapped in an inactive 6S pICln-Sm complex by the chaperone CLNS1A that controls the assembly of the core snRNP. Dissociation by the SMN complex of CLNS1A from the trapped Sm proteins and their transfer to an SMN-Sm complex triggers the assembly of core snRNPs and their transport to the nucleus. Ensures the correct splicing of U12 intron-containing genes that may be important for normal motor and proprioceptive neurons development. Also required for resolving RNA-DNA hybrids created by RNA polymerase II, that form R-loop in transcription terminal regions, an important step in proper transcription termination. May also play a role in the metabolism of small nucleolar ribonucleoprotein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P97801
Storage Buffer	Tris-based buffer,50% glycerol
Product Type	Recombinant Protein
Species	Mus musculus (Mouse)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MAMGSGGAGSEQEDTVLFRRGTGQSDDSDIWDDTALIKAYDKAVASFKHALK NGDICETPKPKGTARRKPAKKNKSQKKNATTPKQWKVGDKCSAVWSE CIPATITSIDFKRETCVVVYTYGNREEQNLSDLLSPTCEVANSTEQNTQENE SQVSTDDSEHSSRSLRKAHSSKAAPWTSFLPPPPMPPGSLGPGKPKGLKF NGPPPPPLPPPPFLPCWMPFPSPGPPPIPPPPPISPDCLDDTDALGSMLISWY MSGYHTGYMGRQNKKEGKCSHTN
Lead Time	3-7 business days
Research Area	Neuroscience
Source	Mammalian cell
Gene Names	Smn1
Protein Names	Smn



Expression Region	1-288aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	35.3kDa
Protein Description	Full Length

Image

(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.