Recombinant Mouse SMN1 Protein (1-288 aa), His-Myc-tagged

Cat. No. SMN1-2808M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse SMN1 Protein (1-288 aa) is produced by Baculovirus expression system. This protein is fused with a 10xHis tag at the N-terminal and a Myc tag at the C-terminal. Research Area: Epigenetics and Nuclear Signaling. Protein Description: Full Length.
Species	Mouse
Source	Insect Cells
ProteinLength	1-288 aa
Description	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

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	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 (snoRNPs).
Form	Tris-based buffer,50% glycerol
Molecular Mass	35.3 kDa
AA Sequence	MAMGSGGAGSEQEDTVLFRRGTGQSDDSDIWDDTALIKAYDKAVASFKHALKNGDICETPDKPKGTARRKPAKKNKSQKKNATTPLKQWKVGDKCSAVWSEDGCIYPATITSIDFKRETCVVVYTGYGNREEQNLSDLLSPTCEVANSTEQNTQENESQVSTDDSEHSSRSLRSKAHSKSKAAPWTSFLPPPPPMPGSGLGPGKPGLKFNGPPPPPPLPPPPFLPCWMPPFPSGPPIIPPPPPISPDCLDDTDALGSMLISWYMSGYHTGYYMGFRQNKKEGKCSHTN
Purity	> 85% as determined by SDS-PAGE.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4 centigrade for up to one week.
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 centigrade/-80 centigrade. The shelf life of lyophilized form is 12 months at -20 centigrade/-80 centigrade.
Concentration	A hardcopy of COA will be sent along with the products. Please refer to it for detailed information.

GENE INFORMATION

Gene Name	Smn1 survival motor neuron 1 [Mus musculus]

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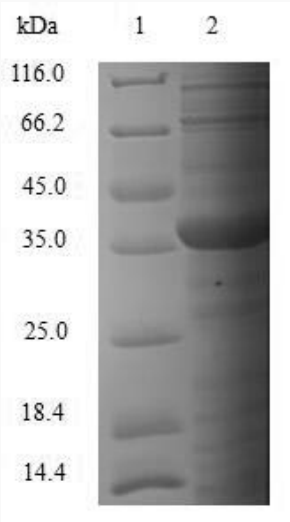
Official Symbol	SMN1
Synonyms	SMN1; survival motor neuron 1; survival motor neuron protein; survival of motor neuron protein; Smn; Gemin1; AI849087;
Gene ID	20595
mRNA Refseq	NM_001252629
Protein Refseq	NP_001239558
UniProt ID	P97801



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

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