

Product datasheet for **TP503917**

Smn1 (NM_011420) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse survival motor neuron 1 (Smn1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR203917 protein sequence Red =Cloning site Green =Tags(s)

MAMGSGGAGSEQEDTVLFRRGTGQSDSDIWDDTALIKAYDKAVASFKHALKNGDICETPKPKGTARRK
PAKKNKSQKKNATTPLKQWKVGDKCSAVWSEDGCIYPATITSIDFKRETCVVVYTGYNREEQNLSDLLS
PTCEVANSTEQNTQENESQVSTDDSEHSSRLRSKAHSSKAAPWTSFLPPPPMPGSGGLPGKPLKFN
GPPPPPLPPPPFLPCWMPFPSPGPIIPPPPIIPDCLDDTDALGSMLISWYMSGYHTGYMGRQNKK
EGKCSHTN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	31.3 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u>NP_035550</u>
Locus ID:	20595
UniProt ID:	<u>P97801</u> , <u>Q549F9</u>



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RefSeq Size: 1227

Cytogenetics: 13 52.99 cM

RefSeq ORF: 867

Synonyms: AI849087; Gemin1; Smn

Summary: 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 (snoRNPs).[UniProtKB/Swiss-Prot Function]