

Datasheet for ABIN7563565
SMN1 Protein (AA 1-288) (His tag)



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Overview

Quantity:	1 mg
Target:	SMN1
Protein Characteristics:	AA 1-288
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMN1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Smn1 Protein expressed in mammalien cells.
Sequence:	MAMGSGGAGS EQEDTVLFRR GTGQSDSDI WDDTALIKAY DKAVASFKHA LKNGDICETP DKPKGTARRK PAKKNKSQKK NATTPLKQWK VGDKCSAVWS EDGCIYPATI TSIDFKRETC VVVYTYGYNR EEQNLSDLLS PTCEVANSTE QNTQENESQV STDDSEHSSR SLRSKAHSKS KAAPWTSFLP PPPMPGSSL GPGKPLKFN GPPPPPLPP PPFLPCWMPP FPSGPPIPP PPPISPDCLD DTDALGSM LI SWYMSGYHTG YYMGFRQNKK EGKCSHTN Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.
Characteristics:	Key Benefits: <ul style="list-style-type: none">• Made to order protein - from design to production - by highly experienced protein experts.

Product Details

- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
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Grade:	custom-made
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Target Details

Target:	SMN1
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Alternative Name:	Smn1 (SMN1 Products)
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Background:	<p>Survival motor neuron protein,FUNCTION: The SMN complex catalyzes the assembly of small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome, and 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 (Sm core). 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. To assemble core snRNPs, the SMN complex accepts the trapped 5Sm proteins from CLNS1A forming an intermediate. Binding of snRNA inside 5Sm ultimately triggers eviction of the SMN complex, thereby allowing binding of SNRPD3 and SNRPB to complete assembly of the core snRNP. Within the SMN complex, SMN1 acts as a structural backbone and together with GEMIN2 it gathers the Sm complex subunits (By similarity). Ensures the correct splicing of U12 intron-containing genes that may be important for normal motor and proprioceptive neurons development (PubMed:23063131). Also required for resolving RNA-DNA hybrids created by RNA polymerase II, that form R-loop in transcription</p>
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Target Details

terminal regions, an important step in proper transcription termination. May also play a role in the metabolism of small nucleolar ribonucleoprotein (snoRNPs) (By similarity).
{ECO:0000250|UniProtKB:Q16637, ECO:0000269|PubMed:23063131}.

Molecular Weight: 31.3 kDa

UniProt: [P97801](#)

Pathways: [Ribonucleoprotein Complex Subunit Organization](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months