

Datasheet for ABIN7553999

GEMIN5 Protein (AA 1-1508) (His tag)[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	GEMIN5
Protein Characteristics:	AA 1-1508
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GEMIN5 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat GEMIN5 Protein expressed in mammalien cells.
Sequence:	MGQEPRTLPP SPNWYCARCS DAVPGGLFGF AARTSVFLVR VGPGAGESPG TPPFRVIGEL VGHTERVSGF TFSHHPGQYN LCATSSDDGT VKIWDVETKT VTEHALHQH TISTLHWSRP VKDLIVSGDE KGVVFCYWFN RNDSQLFIE PRTIFCLTCS PHHEDLVAIG YKDGIVIID ISKKGEVIHR LRGHDDEIHS IAWCPLPGED CLSINQEETS EEAEITNGNA VAQAPVTKGC YLATGSKDQT IRIWCSRGR GVMILKLPFL KRRGGGIDPT VKERLWLT LH WPSNQPTQLV SSCFGGELLQ WDLTQSWRRK YTLFSASSEG QNHSRIVFNL CPLQTEDDKQ LLLSTSMDRD VKCWDIATLE CSWTLPSLGG FAYSLAFSSV DIGSLAIGVG DGMIRVWNTL SIKNNYDVKN FWQGVKSKVT ALCWHPTKEG CLAFGTDDGK VGLYDTYSNK PPQISSYHK KTVYTLAWGP PVPPMSLGGE GDRPSLALYS CGGEGIVLQH NPWKLSGEAF DINKLIRD TN SIKYKLPVHT EISWKADGKI MALGNEDGSI EIFQIPNLKL ICTIQHHKL VNTISWHHEH GSQPELSYLM ASGSNNAVIY VHNLKTVIES SPESPVTITE PYRTL SGHTA KITSVAWSPH HDGRLVSASY

DGTAQVWDAL REEPLCNFRG HRGRLLCVAW SPLDPDCIYS GADDFCVHKW LTSMQDHSRP
PQGKKSIELE KKRLSQPKAK PPKKKKPTLR TPVKLESIDG NEEESMKENS GPVENGVSDQ
EGEEQAREPE LPCGLAPAVS REPVICTPVS SGFEKSKVTI NNVKILLKKE PPKEKPETLI
KKRKARSLLP LSTSLDHRSK EELHQDCLVL ATAKHSRELN EDVSADVEER FHLGLFTDRA
TLYRMIDIEG KGHLENGHPE LFHQLMLWKG DLKGVLTAA ERGELTDNLV AMAPAAGYHV
WLWAVEAFAK QLCFQDQYVK AASHLLSIHK VYEAVELLKS NHFYREIAI AKARLRPEDP
VLKDLYLSWG TVLERDGHYA VAAKCYLGAT CAYDAAKVLA KKGDAASLRT AAELAAIVGE
DELSASLALR CAQELLLANN WVGAEALQL HESLQGQRLV FCLLELLSRH LEEKQLSEGK
SSSSYHTWNT GTEGPFVERV TAVWKSIFSL DTPEQYQEAF QKLQNIKYPS ATNNTPAKQL
LLHICHDLTL AVLSQQMASW DEAVQALLRA VVRSYDSGSF TIMQEVYSAF LPDGCDHLRD
KLGDHQSPAT PAFKSLEAFF LYGRLYEFWW SLSRPCPNSS VVVRAGHRTL SVEPSQQLDT
ASTEETDPET SQPEPNRPSE LDLRLTEEGE RMLSTFKELF SEKHASLQNS QRTVAEVQET
LAEMIRQHQK SQLCKSTANG PDKNEPEVEA EQPLCSSQSQ CKEEKNEPLS LPELTKRLTE
ANQRMAKFPE SIKAWPPFDV LECCLVLLLI RSHFPGCLAQ EMQQAQELL QKYGNTKTYR
RHCQTFCM **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:

- Made to order protein - from design to production - by highly experienced protein experts.
- 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

Grade: custom-made

Target Details

Target: GEMIN5

Alternative Name: GEMIN5 ([GEMIN5 Products](#))

Background: Gem-associated protein 5 (Gemin5),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 (PubMed:16857593, PubMed:18984161, PubMed:20513430, PubMed:33963192). 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 (PubMed:18984161). To assemble core snRNPs, the SMN complex accepts the trapped 5Sm proteins from CLNS1A forming an intermediate (PubMed:18984161). 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, GEMIN5 recognizes and delivers the small nuclear RNAs (snRNAs) to the SMN complex (PubMed:11714716, PubMed:16857593, PubMed:19377484, PubMed:19750007, PubMed:20513430, PubMed:27834343, PubMed:27881600, PubMed:27881601, PubMed:16314521). Binds to the 7-methylguanosine cap of RNA molecules (PubMed:19750007, PubMed:27834343, PubMed:27881600, PubMed:27881601, Ref.27). Binds to the 3'-UTR of SMN1 mRNA and regulates its translation, does not affect mRNA stability (PubMed:25911097). May play a role in the regulation of protein synthesis via its interaction with ribosomes (PubMed:27507887). {ECO:0000269|PubMed:11714716, ECO:0000269|PubMed:16314521, ECO:0000269|PubMed:16857593, ECO:0000269|PubMed:18984161, ECO:0000269|PubMed:19377484, ECO:0000269|PubMed:19750007, ECO:0000269|PubMed:20513430, ECO:0000269|PubMed:25911097, ECO:0000269|PubMed:27507887, ECO:0000269|PubMed:27834343, ECO:0000269|PubMed:27881600, ECO:0000269|PubMed:27881601, ECO:0000269|PubMed:33963192, ECO:0000269|Ref.27}.

Molecular Weight: 168.6 kDa

UniProt: [Q8TEQ6](#)

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
