Datasheet for ABIN3092746

GEMIN5 Protein (AA 1-1508) (His tag)

1 Image

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Overview

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

Product Details

Sequence:	MGQEPRTLPP SPNWYCARCS DAVPGGLFGF AARTSVFLVR VGPGAGESPG TPPFRVIGEL VGHTERVSGF TFSHHPGQYN LCATSSDDGT VKIWDVETKT VVTEHALHQH TISTLHWSPR VKDLIVSGDE KGVVFCYWFN RNDSQHLFIE PRTIFCLTCS PHHEDLVAIG YKDGIVVIID ISKKGEVIHR LRGHDDEIHS IAWCPLPGED CLSINQEETS EEAEITNGNA VAQAPVTKGC YLATGSKDQT IRIWSCSRGR GVMILKLPFL KRRGGGIDPT VKERLWLTLH WPSNQPTQLV SSCFGGELLQ WDLTQSWRRK YTLFSASSEG QNHSRIVFNL CPLQTEDDKQ LLLSTSMDRD VKCWDIATLE CSWTLPSLGG FAYSLAFSSV DIGSLAIGVG DGMIRVWNTL SIKNNYDVKN FWQGVKSKVT ALCWHPTKEG CLAFGTDDGK VGLYDTYSNK PPQISSTYHK KTVYTLAWGP PVPPMSLGGE GDRPSLALYS CGGEGIVLQH NPWKLSGEAF DINKLIRDTN SIKYKLPVHT EISWKADGKI MALGNEDGSI EIFQIPNLKL ICTIQQHHKL VNTISWHHEH GSQPELSYLM ASGSNNAVIY VHNLKTVIES SPESPVTITE PYRTLSGHTA KITSVAWSPH HDGRLVSASY DGTAQVWDAL REEPLCNFRG HRGRLLCVAW SPLDPDCIYS GADDFCVHKW LTSMQDHSRP

PQGKKSIELE KKRLSQPKAK PKKKKKPTLR TPVKLESIDG NEEESMKENS GPVENGVSDQ EGEEQAREPE LPCGLAPAVS REPVICTPVS SGFEKSKVTI NNKVILLKKE PPKEKPETLI KKRKARSLLP LSTSLDHRSK EELHQDCLVL ATAKHSRELN EDVSADVEER FHLGLFTDRA TLYRMIDIEG KGHLENGHPE LFHQLMLWKG DLKGVLQTAA ERGELTDNLV AMAPAAGYHV WLWAVEAFAK QLCFQDQYVK AASHLLSIHK VYEAVELLKS NHFYREAIAI AKARLRPEDP VLKDLYLSWG TVLERDGHYA VAAKCYLGAT CAYDAAKVLA KKGDAASLRT AAELAAIVGE DELSASLALR CAQELLLANN WVGAQEALQL HESLQGQRLV FCLLELLSRH LEEKQLSEGK SSSSYHTWNT GTEGPFVERV TAVWKSIFSL DTPEQYQEAF QKLQNIKYPS ATNNTPAKQL LLHICHDLTL AVLSQQMASW DEAVQALLRA VVRSYDSGSF TIMQEVYSAF LPDGCDHLRD KLGDHQSPAT PAFKSLEAFF LYGRLYEFWW SLSRPCPNSS VWVRAGHRTL SVEPSQQLDT ASTEETDPET SQPEPNRPSE LDLRLTEEGE RMLSTFKELF SEKHASLQNS QRTVAEVQET LAEMIRQHQK SQLCKSTANG PDKNEPEVEA EQPLCSSQSQ CKEEKNEPLS LPELTKRLTE ANQRMAKFPE SIKAWPFPDV LECCLVLLLI RSHFPGCLAQ EMQQQAQELL QKYGNTKTYR RHCQTFCM

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human GEMIN5 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded protein.

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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

Product Details

	The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	GEMIN5
Alternative Name:	GEMIN5 (GEMIN5 Products)
Background:	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. GEMIN5 acts as the snRNA-binding protein of the SMN complex. {ECO:0000269|PubMed:11714716, ECO:0000269|PubMed:16857593, ECO:0000269|PubMed:18984161}.
Molecular Weight:	169.5 kDa Including tag.
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 gurantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

Images

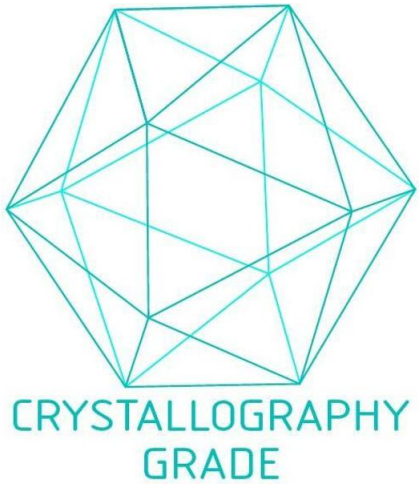

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process