

Datasheet for ABIN7564451 **GEMIN5 Protein (AA 1-1502) (His tag)**



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Quantity:	1 mg
Target:	GEMIN5
Protein Characteristics:	AA 1-1502
Origin:	Mouse
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)

Purpose:	Custom-made recombinat Gemin5 Protein expressed in mammalien cells.
Sequence:	MKPEPRTLPP SPNWYCSRCS DAAPGGIFGF AARTSVFLVR VGPGAGASPG APPFRVVGEL
	VGHTERVSGF TFSHHPGQYN LCATSSDDGT VKVWDVETKT VVTEHTLHQH TISALHWSPT
	VKDLIVSGDE KGVVFCYWLN RNDSQHLFTE PRTIFCLTCS PHHENLVAIG YKDGIVVIID
	ISKKGEVIHR LRGHDDEIHS IAWCPLSGED CLSISQEENS EEPDIPNGKL IAETPITKGC
	YLATGSKDQT IRIWSCSRGR GVMVLKLPFL KRRSGGVDPT VKERLWLTLH WPKNQPTQLV
	SSCFGGELLL WDLTQSWRRK YTLFSTSAEG HNHSRIVFNL CSLKTEDGKQ LLLSTSMDRD
	VKCWDMATLE CCWTLPSLGG FAYSLAFSPV DVGSLAIGVG DGMIRVWNTL SIKNNYDVKN
	FWQGVKSKVT ALCWHPNKEG CLAFGTDDGK VGLYDTCSNK PPQISSTYHK KTVYRLAWGP
	PVPPMSLGGE GDRPSLTLYS CGGEGVVLQH NPWKLSGEAF DINKLVRDTN SIRYKLPVHT
	EISWKGDGKV LALGNEDGSI EIFQVPNLRL LCTIQQHHKL VNAIVWHHEH GSRPELSCLL
	ASGSNNAVIY VHNLKAVLES NPESPITITE PYRTLSGHTA KITSLAWSPH HDGRLVSACY

DGTAQVWDAL REEPLFNFRG HRGRLLCVAW SPVDPECIYS GADDFCVYRW LTSMQDHSRP
PQGKKCIELE KKRLSQFKPK LKKKKKPTLR LPVKQDSSVG NEDESVKENS GPAENGLSDQ
DGEEEAQEPE LPPSPVVCVE PVSCTDICSG FEKSKVTVSS KATSLKKEPA KEKPEALLKK
RKARSMLPLS TSLDHRSKEE LHRDCLVLAT ATHAKAELNE DVSADLEERF HLGLFTDRAT
LYRMMETEGK GHLESGHPEL FHQLMLWKGD LKGVLQAAAE RGELTDSLVA VAPVAGYSVW
LWAVEAFAKQ LCFQDQYVKA ASYLLSIHKV YEAVELLKSN HLYREAIAVA KARLRPEDPV
LKELYLSWGS ILERDGHYAI AAKCYLGATS AYDAAKVLAR KGDAASLRTA AELAAIAGEH
ELAASLALRC AQELLLMKNW VGAQEALGLH ESLQGQRLVF CLLELLCRHL EEKQPLEVRG
PSSIYHQWAT GSEGTLVQRV TGVWRSAFSV DTPEQCQAAL QKLQDVKYPS ATSNTPFRQL
LLHVCHDLTL AMLSQQAAAW EEAVPALLQA VVRSYTSGNF TLMQEIYSAF LPGGCDHLRD
KLGDLSPAMA AYKSLEAFCI YGQLYEVWWS LCGPGPESSV WVLSAESTVS DKQSKPEDSA
SAEDMEQPPG PGPRLSAESE RLLSACKELF SERHASLQTS QRTVAEVQET LAEMIRQHQK
SQLCKATTNG PSRDEPSRDE PSQEAERAPS QPPSPTEERN APVSLPELTR RLTEANERIA
EFPESVKAWP FPDVLECCLV LLHIGSQCPD AVDPEMQQQA QELLHKYGHT RAYRRHCQSR HT

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 mammalien 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. 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 pICIn-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,		
	GEMIN5 recognizes and delivers the small nuclear RNAs (snRNAs) to the SMN complex. Binds		
	to the 7-methylguanosine cap of RNA molecules (By similarity). 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 (By similarity)		
	{ECO:0000250 UniProtKB:Q8TEQ6, ECO:0000269 PubMed:25911097}.		
Molecular Weight:	166.6 kDa		
UniProt:	Q8BX17		
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.		

Handling

Storage:	-80 °C	
Storage Comment:	Store at -80°C.	
Expiry Date:	12 months	