Datasheet for ABIN7547972

SIP1 Protein (AA 1-280) (His tag)

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Overview

Quantity:	1 mg
Target:	SIP1 (GEMIN2)
Protein Characteristics:	AA 1-280
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SIP1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant GEMIN2 Protein expressed in mammalian cells.
Sequence:	MRRAELAGLK TMAWVPAESA VEELMPRLLP VEPCDLTEGF DPSVPPRTPQ EYLRRVQIEA AQCPDVVVAQ IDPKKLKRKQ SVNISLSGCQ PAPEGYSPTL QWQQQQVAQF STVRQNVNKH RSHWKSQQLD SNVTMPKSED EEGWKKFCLG EKLCADGAVG PATNESPGID YVQIGFPPLL SIVSRMNQAT VTSVLEYLSN WFGERDFTPE LGRWLYALLA CLEKPLLPEA HSLIRQLARR CSEVRLLVDS KDDERVPALN LLICLVSRYF DQRDLADEPS **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.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

Product Details

	• 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	SIP1 (GEMIN2)
Alternative Name:	GEMIN2 (GEMIN2 Products)
Background:	Gem-associated protein 2 (Gemin-2) (Component of gems 2) (Survival of motor neuron protein-interacting protein 1) (SMN-interacting protein 1),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:18984161, PubMed:9323129). 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) (PubMed:18984161). In the cytosol, the Sm proteins SNRPD1, SNRPD2, SNRPE, SNRPF and SNRPG (5Sm) 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 (PubMed:18984161, PubMed:9323129). 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 (PubMed:31799625). Within the SMN complex, GEMIN2 constrains the conformation of

Target Details

	5Sm, thereby promoting 5Sm binding to snRNA containing the snRNP code (a nonameric Sm site and a 3'-adjacent stem-loop), thus preventing progression of assembly until a cognate substrate is bound (PubMed:31799625, PubMed:21816274, PubMed:16314521). {ECO:0000269|PubMed:16314521, ECO:0000269|PubMed:18984161, ECO:0000269|PubMed:21816274, ECO:0000269|PubMed:31799625, ECO:0000269|PubMed:9323129}.
Molecular Weight:	31.6 kDa
UniProt:	O14893
Pathways:	Ribonucleoprotein Complex Subunit Organization, Tube Formation

Application Details

Application Notes:	We expect the protein to work for functional studies. 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