

Datasheet for ABIN7545996
SESN1 Protein (AA 1-492) (His tag)



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Overview

Quantity:	1 mg
Target:	SESN1
Protein Characteristics:	AA 1-492
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SESN1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant SESN1 Protein expressed in mammalian cells.
Sequence:	<p>MRLAAAANEAYTAPLAVSGL LGCKQCGGGR DQDEELGIRI PRPLGQGPSR FIPEKEILQV GSEDAQMHAL FADSFAALGR LDNITLVMVF HPQYLESFLK TQHYLLQMDG PLPLHYRHYI GIMAAARHQC SYLVNLHVND FLHVGGDPKW LNGLNAPQK LQNLGELNKV LAHRPWLITK EHIEGLLKAE EHSWSLAELV HAVVLLTHYH SLASFTFGCG ISPEIHCDGG HTRPPSVSN YCICDITNGN HSDVDEMPVNS AENSVSDFS FEVEALMEKM RQLQECRDEE EASQEEMASR FEIEKRESMF VFSSDDEEVT PARAVSRHFE DTSYGYKDFS RHGMHVPTFR VQDYCWEDHG YSLVNRLYPD VGQLIDEKFH IAYNLTYNTM AMHKDVDTSMLRRAIWNYYH CMFGIRYDDY DYGEINQLLD RSFKVYIKTV VCTPEKVTKR MYDSFWRQFK HSEKVHVNLL LIEARMQ AEL LYALRAITRY MT 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.</p>
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different

Product Details

isoform, please contact us regarding an individual offer.

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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Target:

SESN1

Alternative Name:

SESN1 ([SESN1 Products](#))

Background:

Sestrin-1 (EC 1.11.1.-) (p53-regulated protein PA26),FUNCTION: Functions as an intracellular leucine sensor that negatively regulates the TORC1 signaling pathway through the GATOR complex. In absence of leucine, binds the GATOR subcomplex GATOR2 and prevents TORC1 signaling. Binding of leucine to SESN2 disrupts its interaction with GATOR2 thereby activating the TORC1 signaling pathway (PubMed:25263562, PubMed:26449471). This stress-inducible metabolic regulator may also play a role in protection against oxidative and genotoxic stresses (By similarity). May positively regulate the transcription by NFE2L2 of genes involved in the response to oxidative stress by facilitating the SQSTM1-mediated autophagic degradation of KEAP1 (PubMed:23274085). Moreover, may prevent the accumulation of reactive oxygen species (ROS) through the alkylhydroperoxide reductase activity born by the N-terminal domain of the protein (By similarity). Was originally reported to contribute to oxidative stress resistance by reducing PRDX1 (PubMed:15105503). However, this could not be confirmed (By similarity).

Target Details

{ECO:0000250|UniProtKB:P58004, ECO:0000269|PubMed:15105503, ECO:0000269|PubMed:23274085, ECO:0000269|PubMed:25263562, ECO:0000269|PubMed:26449471}.

Molecular Weight: 56.6 kDa

UniProt: [Q9Y6P5](#)

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