

Datasheet for ABIN7563462 **SESN1 Protein (AA 1-492) (His tag)**



Overview

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

Purpose:	Custom-made recombinant Sesn1 Protein expressed in mammalian cells.
Sequence:	MRLAAASNEA YAASLAVSEL LSCHQCGGDR GQDEELGIRI PRPLGHGPSR FIPEKEMLQV
	GSEDAQMHAL FADSFAALGR LDNITLVMVF HPQYLESFLK TQHYLLQMDG PLPLHYRHYI
	GIMAAARHQC SYLVNLHVSD FLHVGGDPKW LNGLENAPQK LQNLGELNKV LAHRPWLITK
	EHIEGLLKAE EHSWSLAELV HAVVLLTHYH SLASFTFGCG ISPEIHCDGG HTFRPPSVSN
	YCICDITNGN HSVDEMQVNS AGNASVSDSF FEVEALMEKM RQLQECREEE EASQEEMASR
	FEMEKRESMF VFSSDDDEVT PARDVSRHFE DTSYGYKDFS RHGMHVPTFR VQDYCWEDHG
	YSLVNRLYPD VGQLIDEKFH IAYNLTYNTM AMHKDVDTSM LRRAIWNYIH CMFGIRYDDY
	DYGEINQLLD RSFKVYIKTV VCTPEKVTKR MYDSFWRQFK HSEKVHVNLL LIEARMQAEL
	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.

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. > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC) Purity: Grade: custom-made **Target Details** SESN1 Target: Alternative Name: Sesn1 (SESN1 Products) Background: Sestrin-1 (EC 1.11.1.-), 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:25259925). This stress-inducible metabolic regulator may also play a role in protection against oxidative and genotoxic stresses. May positively regulate the transcription by NFE2L2 of genes involved in the response to oxidative stress by facilitating the SQSTM1mediated autophagic degradation of KEAP1. Moreover, may prevent the accumulation of reactive oxygen species (ROS) through the alkylhydroperoxide reductase activity born by the Nterminal domain of the protein. Was originally reported to contribute to oxidative stress resistance by reducing PRDX1. However, this could not be confirmed (By similarity). {ECO:0000250|UniProtKB:P58004, ECO:0000269|PubMed:25259925}.

Target Details

Molecular Weight:	56.6 kDa
UniProt:	P58006

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