Datasheet for ABIN3134526

SESN1 Protein (AA 1-492) (His tag)

1 Image

Go to Product page

Overview

Quantity:	1 mg
Target:	SESN1
Protein Characteristics:	AA 1-492
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SESN1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

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. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

Product Details

Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Mouse Sesn1 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. 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:	SESN1
Alternative Name:	Sesn1 (SESN1 Products)
Background:	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 SQSTM1-mediated autophagic degradation of KEAP1. May have an alkylhydroperoxide reductase activity born by the N-terminal 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}.
Molecular Weight:	57.6 kDa Including tag.
UniProt:	P58006

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:	Protein has not been tested for activity yet. 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

Handling

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