antibodies .- online.com





Sestrin 2 Protein (SESN2) (AA 1-480) (His tag)



Image



Go to Product page

Overview

Quantity:	1 mg
Target:	Sestrin 2 (SESN2)
Protein Characteristics:	AA 1-480
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Sestrin 2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:

MIVADSECHS EIKGYLPFTR GGVAGPETRE EHREGQARRG SRGPSAFIPV EEILREGAES
LEQHLGLEAL MSSGRVDNLA VVMGLHPDYL SSFWRLHYLL LHTDGPLASS WRHYIAIMAA
ARHQCSYLVG SHMTEFLQTG GDPEWLLGLH RAPEKLRKLS EVNKLLAHRP WLITKEHIQA
LLKTGEHSWS LAELIQALVL LTHCHSLASF VFGCGILPEG DAEGSPASQA PSPPSEQGTP
PSGDPLNNSG GFEAARDVEA LMERMRQLQE SLLRDEGASQ EEMENRFELE KSESLLVTPS
ADILEPSPHP DILCFVEDPA FGYEDFTRRG TQAPPTFRAQ DYTWEDHGYS LIQRLYPEGG
QLLDEKFQVA CSLTYNTIAM HSGVDTSMLR RAIWNYIHCV FGIRYDDYDY GEVNQLLERN
LKIYIKTVAC YPEKTTRRMY NLFWRHFRHS EKVHVNLLLL EARMQAALLY ALRAITRYMT
Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany from design to production by highly experienced protein experts.
- Mouse Sesn2 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:

- 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.
- 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: Sestrin 2 (SESN2)

Alternative Name:

Sesn2 (SESN2 Products)

Target Details

Handling Advice:

rarget Details	
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:18692468,
	PubMed:25259925). This stress-inducible metabolic regulator also plays a role in protection
	against oxidative and genotoxic stresses. May negatively regulate protein translation in
	response to endoplasmic reticulum stress, via TORC1 (PubMed:24947615). 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). May
	also mediate TP53 inhibition of TORC1 signaling upon genotoxic stress (PubMed:18692468).
	Has an 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 (By similarity). However, this could not be confirmed (By similarity).
	{ECO:0000250 UniProtKB:P58004, ECO:0000269 PubMed:18692468,
	ECO:0000269 PubMed:23274085, ECO:0000269 PubMed:24947615,
	ECO:0000269 PubMed:25259925}.
Molecular Weight:	55.3 kDa Including tag.
UniProt:	P58043
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.

Avoid repeated freeze-thaw cycles.

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images

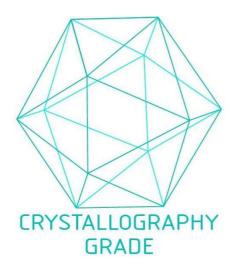


Image 1. "Crystallography Grade" protein due to multi-step, protein-specific purification process