

# Datasheet for ABIN3095537 SPAG8 Protein (AA 1-426) (His tag)



### Overview

Quantity:	1 mg
Target:	SPAG8
Protein Characteristics:	AA 1-426
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SPAG8 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS), Crystallization (Crys)

### **Product Details**

## Sequence:

METNESTEGS RSRSRSLDIQ PSSEGLGPTS EPFPSSDDSP RSALAAATAA AAAAASAAAA
TAAFTTAKAA ALSTKTPAPC SEFMEPSSDP SLLGEPCAGP GFTHNIAHGS LGFEPVYVSC
IAQDTCTTTD HSSNPGPVPG SSSGPVLGSS SGAGHGSGSG SGPGCGSVPG SGSGPGPGSG
PGSGPGHGSG SHPGPASGPG PDTGPDSELS PCIPPGFRNL VADRVPNYTS WSQHCPWEPQ
KQPPWEFLQV LEPGARGLWK PPDIKGKLMV CYETLPRGQC LLYNWEEERA TNHLDQVPSM
QDGSESFFFR HGHRGLLTMQ LKSPMPSSTT QKDSYQPPGN VYWPLRGKRE AMLEMLLQHQ
ICKEVQAEQE PTRKLFEVES VTHHDYRMEL AQAGTPAPTK PHDYRQEQPE TFWIQRAPQL
PVCEGD

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.
- Human SPAG8 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

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

the Expasy's protparam tool to determine the absorption coefficient of each protein.

- 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: SPAG8

Alternative Name: SPAG8 (SPAG8 Products)

# **Target Details**

•	
Background:	Plays a role in spermatogenesis by enhancing the binding of CREM isoform tau to its coactivator FHL5 and increasing the FHL5-regulated transcriptional activation of CREM isoform tau (By similarity). Involved in the acrosome reaction and in binding of sperm to the zona pellucida (By similarity). Plays a role in regulation of the cell cycle by controlling progression through the G2/M phase, possibly by delaying the activation of CDK1 which is required for entry into mitosis (PubMed:19548270). May play a role in fertility and microtubule formation through interaction with RANBP9 (PubMed:10500252). {ECO:0000250 UniProtKB:Q3V0Q6, ECO:0000269 PubMed:10500252, ECO:0000269 PubMed:19548270}.
Molecular Weight:	45.8 kDa Including tag.
UniProt:	Q99932
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:	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
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)