

Datasheet for ABIN3136894
TGS1 Protein (AA 1-853) (His tag)

1 Image

[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	TGS1
Protein Characteristics:	AA 1-853
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TGS1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS), Crystallization (Crys)

Product Details

Sequence:	MCCEKWNHVA EMLLFIEDRE EEYKILCLCS RAFVEDRKLY NLGLKGYVVK SSGNNAGDQG TEEEEDGHSN GTAESHSPNE SDLDSEAKLM RSMGLPIQFG RMSSHENFEM SMNARNKAKV KQKRRKHQKR YLDEMVRWS RNDYEEDDLV VSDDPSSVEH CENNRTCEIQ SKAGSEVENL PVENTLAPKL EVPENWEKYW NEYGEGLLWQ SWQEKYPDQT LSSEPWNLPD TKEEWEQHYS QLYWYYLEQF QYWEAQGWTF TASQNCDDKV YTSHTVDQN AEESLKADVM TFSSSPNIVE DEIPGSNDND HNEIITAINN ITVSAEKVEQ SQLDSSQHCD EPLSEITGKE CPASGGSDSC NGTPKENDIS ENRSSDQPAK ELQESSGTNK GKHRPHHNGA DGHESDDDDPP EHKPSKVKRS HELDVDENPD SEVDDNGFLL GFKHGGSGQKY GGIPNFSHRQ VRYLEKNVKY KSKYLDLRKQ MPVKSKHILF TEDSGKPFVW CKSKVRKVE KFLKWWNERV DEETSQDSLS QNKMQDTCTS SDSEEQDMSL EKADNLMETR DPEPEKCQII SSATELEAEK SEVGLSVATV PENCSTEEIP NSPHAETEVE IKKKKKKKKNKN KKKINDLPPEI ASVPELAKYW AQRYLFSRF DDGIKLDKEG WFSVTPEKIA EHIAGRVSAQ FRCDVVDAF CGVGGNTIQF ALTGKRVAI DIDPVKIDLA
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RNNAEYVGIA DKIEFICGDF LLLAPCLKAD VVFLSPPWGG PDYATAETFD IRTMMSPDGF
EIFRLSQKIT NNIVYFLPRN ADIDQVASLA GLGGQVEIEQ NFLNNKLKTI TAYFGDLIRR
PALLKTSTSE AEV

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 Tgs1 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 receipt 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.
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Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Product Details

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target: TGS1

Alternative Name: Tgs1 ([TGS1 Products](#))

Background: Catalyzes the 2 serial methylation steps for the conversion of the 7-monomethylguanosine (m(7)G) caps of snRNAs and snoRNAs to a 2,2,7-trimethylguanosine (m(2,2,7)G) cap structure. The enzyme is specific for guanine, and N7 methylation must precede N2 methylation. Hypermethylation of the m7G cap of U snRNAs leads to their concentration in nuclear foci, their colocalization with coilin and the formation of canonical Cajal bodies (CBs). Plays a role in transcriptional regulation (By similarity). {ECO:0000250, ECO:0000269|PubMed:11517327}.

Molecular Weight: 97.7 kDa Including tag.

UniProt: [Q923W1](#)

Pathways: [Mitotic G1-G1/S Phases](#), [Regulation of Lipid Metabolism by PPARAlpha](#), [Ribonucleoprotein Complex Subunit Organization](#)

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 guarantee 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.

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