

Datasheet for ABIN3095924

TGS1 Protein (AA 1-853) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	TGS1
Protein Characteristics:	AA 1-853
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TGS1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AlIcE®
Sequence:	<p>MCCEKWSRVA EMFLFIEERE DCKILCLCSR AFVEDRKLYN LGLKGYIIRD SGNNSGDQAT</p> <p>EEEEGGYSCG TAESHDSKGI GLDESELDSE AELMRSMGLP LQFGRITAHK DFEVSMNTRN</p> <p>KVKIKKKKHQ KKYLDIVQE SWRKEYEEDD ILASDDPSSI EQYENTRTYE LQSKKDTETE</p> <p>NPPVENTLSP KLEITEKWEK YWNEYGGGLL WQSWQEKHPG QALSSEPWNF PDTKEEWEQH</p> <p>YSQLYWYYLE QFQYWEAQGW TFDASQSCDT DTYTSKTEAD DKNDEKCMKV DLVSFPSSPI</p> <p>MVDNDSSGTS DKDHSEILDG ISNIKLNSEE VTQSQLDSCT SHDGHQQLSE VSSKRECPAS</p> <p>GQSEPRNGGT NEESNSSGNT NTDPPAEDSQ KSSGANTSKD RPHASGTDGD ESEEDPPEHK</p> <p>PSKLKRSHL DIDENPASDF DSGSLLGFK YGSGQKYGGI PNFSHRQVRY LEKNVKLKSK</p> <p>YLDMRRQIKM KNKHIFTKE SEKPFFKSK ILSKVEKFLT WVNKPMDEEA SQESSSHDNV</p> <p>HDASTSSDSE EQDMSVKKGD DLLETNNPEP EKCQSVSSAG ELETENYERD SLLATVPDEQ</p> <p>DCVTQEV PDS RQAETEA EVK KKKNNKKNNK VNGLPPEIAA VPELAKYWAQ RYRLFSRFDD</p>

GIKLDREGWF SVTPEKIAEH IAGRVSQSFK CDVVVDAFCG VGGNTIQFAL TGMRVIAIDI
DPVKIALARN NAEVYGIADK IEFICGDFLL LASFLKADV FLSPPWGGPD YATAETFDIR
TMMSPDGFEI FRLSKKITNN IVYFLPRNAD IDQVASLAGP GGQVEIEQNF LNNKLKTITA
YFGDLIRRP SET

Sequence without tag. The proposed Strep-Tag is based on experience s 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.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification: One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: TGS1

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

Background: Trimethylguanosine synthase (EC 2.1.1.-) (CLL-associated antigen KW-2) (Cap-specific guanine-N2 methyltransferase) (Hepatocellular carcinoma-associated antigen 137) (Nuclear receptor coactivator 6-interacting protein) (PRIP-interacting protein with methyltransferase motif) (PIMT) (PIPMT),FUNCTION: 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. {ECO:0000269|PubMed:11517327, ECO:0000269|PubMed:11912212, ECO:0000269|PubMed:16687569, ECO:0000269|PubMed:18775984}.

Molecular Weight: 96.6 kDa

UniProt: [Q96RS0](#)

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: ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

Application Details

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months