

Datasheet for ABIN3092505

**GSPT2 Protein (AA 1-628) (Strep Tag)****1** Image[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	GSPT2
Protein Characteristics:	AA 1-628
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GSPT2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Sequence:	MDSGSSSSDS APDCWDQVDM ESPGSAPSGD GVSSAVAEAQ REPLSSAFSR KLNVNAPFV PNVHAAEFVP SFLRGPTQPP TLPAGSGSND ETCTGAGYPQ GKRMGRGAPV EPSREEPLVS LEGSNSAVTM ELSEPVVENG EVEMALEESW EHSKEVSEAE PGGGSSGDSG PPEESGQEMM EEKEEIRKSK SVIVPSGAPK KEHVNNVFIG HVDAGKSTIG GQIMFLTGMV DKRTLEKYER EAKEKNRETW YLSWALDTNQ EERDKGKTVE VGRAYFETER KHFTILDAPG HKSFVPMNIG GASQADLAVL VISARKGEFE TGFEKGGQTR EHAMLAKTAG VKHLIVLINK MDDPTVNWSI ERYEECKEKL VPFLKKVGFS PKKDIHFMPK SGLTGANIKE QSDFCPWYTG LPFIPYLDNL PNFNRSIDGP IRLPIVDKYK DMGTVVLGKL ESGSIFKGQQ LVMMMPNKHNV EVLGILSDDT ETDFVAPGEN LKIRLKGIEE EEILPGFILC DPSNLCHSGR TFDVQIVIE HKSIICPGYN AVLHIHTCIE EVEITALISL VDKKSGEKSK TRPRFVKQDQ VCIARLRTAG TICLETFKDF PQMGRFTLRD EGKTIAIGKV LKLVPEKD
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**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.**

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### Characteristics:

#### Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

#### 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 in several dilutions and is measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

### Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag

## Product Details

capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

## Target Details

Target:	GSPT2
Alternative Name:	GSPT2 ( <a href="#">GSPT2 Products</a> )
Background:	<p>Eukaryotic peptide chain release factor GTP-binding subunit ERF3B (Eukaryotic peptide chain release factor subunit 3b) (eRF3b) (EC 3.6.5.-) (G1 to S phase transition protein 2 homolog),FUNCTION: GTPase component of the eRF1-eRF3-GTP ternary complex, a ternary complex that mediates translation termination in response to the termination codons UAA, UAG and UGA (PubMed:15987998, PubMed:11524954, PubMed:17562865). GSPT2/ERF3B mediates ETF1/ERF1 delivery to stop codons: The eRF1-eRF3-GTP complex binds to a stop codon in the ribosomal A-site (PubMed:15987998). GTP hydrolysis by GSPT2/ERF3B induces a conformational change that leads to its dissociation, permitting ETF1/ERF1 to accommodate fully in the A-site (PubMed:15987998). Component of the transient SURF complex which recruits UPF1 to stalled ribosomes in the context of nonsense-mediated decay (NMD) of mRNAs containing premature stop codons (PubMed:19417104).</p> <p>{ECO:0000269 PubMed:11524954, ECO:0000269 PubMed:15987998, ECO:0000269 PubMed:17562865, ECO:0000269 PubMed:19417104}.</p>
Molecular Weight:	68.9 kDa
UniProt:	<a href="#">Q8IYD1</a>

## 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

## Application Details

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Restrictions: For Research Use only

## Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
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