

# Datasheet for ABIN3092805

# GPSM2 Protein (AA 1-684) (Strep Tag)



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Quantity:	250 μg
Target:	GPSM2
Protein Characteristics:	AA 1-684
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GPSM2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details		
Brand:	AliCE®	
Sequence:	MEENLISMRE DHSFHVRYRM EASCLELALE GERLCKSGDC RAGVSFFEAA VQVGTEDLKT	
	LSAIYSQLGN AYFYLHDYAK ALEYHHHDLT LARTIGDQLG EAKASGNLGN TLKVLGNFDE	
	AIVCCQRHLD ISRELNDKVG EARALYNLGN VYHAKGKSFG CPGPQDVGEF PEEVRDALQA	
	AVDFYEENLS LVTALGDRAA QGRAFGNLGN THYLLGNFRD AVIAHEQRLL IAKEFGDKAA	
	ERRAYSNLGN AYIFLGEFET ASEYYKKTLL LARQLKDRAV EAQSCYSLGN TYTLLQDYEK	
	AIDYHLKHLA IAQELNDRIG EGRACWSLGN AYTALGNHDQ AMHFAEKHLE ISREVGDKSG	
	ELTARLNLSD LQMVLGLSYS TNNSIMSENT EIDSSLNGVR PKLGRRHSME NMELMKLTPE	
	KVQNWNSEIL AKQKPLIAKP SAKLLFVNRL KGKKYKTNSS TKVLQDASNS IDHRIPNSQR	
	KISADTIGDE GFFDLLSRFQ SNRMDDQRCC LQEKNCHTAS TTTSSTPPKM MLKTSSVPVV	
	SPNTDEFLDL LASSQSRRLD DQRASFSNLP GLRLTQNSQS VLSHLMTNDN KEADEDFFDI	
	LVKCQGSRLD DQRCAPPPAT TKGPTVPDED FFSLILRSQG KRMDEQRVLL QRDQNRDTDF	

### GLKDFLQNNA LLEFKNSGKK SADH

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 posttranslational 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.

## Purification:

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

Product Details		
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).	
Grade:	custom-made	
Target Details		
Target:	GPSM2	
Alternative Name:	GPSM2 (GPSM2 Products)	
Background:	G-protein-signaling modulator 2 (Mosaic protein LGN),FUNCTION: Plays an important role in mitotic spindle pole organization via its interaction with NUMA1 (PubMed:11781568, PubMed:15632202, PubMed:21816348). Required for cortical dynein-dynactin complex recruitment during metaphase (PubMed:22327364). Plays a role in metaphase spindle orientation (PubMed:22327364). Also plays an important role in asymmetric cell divisions (PubMed:21816348). Has guanine nucleotide dissociation inhibitor (GDI) activity towards G(i) alpha proteins, such as GNAI1 and GNAI3, and thereby regulates their activity (By similarity). {ECO:0000250 UniProtKB:Q8VDU0, ECO:0000269 PubMed:11781568, ECO:0000269 PubMed:15632202, ECO:0000269 PubMed:21816348, ECO:0000269 PubMed:22327364}.	
Molecular Weight:	76.7 kDa	
UniProt:	P81274	
Pathways:	Regulation of G-Protein Coupled Receptor Protein Signaling	
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.  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	

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components needed for protein production (amino acids, cofactors, etc.) are added to produce

# **Application Details**

	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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months