

Datasheet for ABIN3137571 **GSG2 Protein (AA 1-754) (Strep Tag)**



Overview

Quantity:	250 μg
Target:	GSG2
Protein Characteristics:	AA 1-754
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GSG2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MAQAHPRSGT RLFRTYAARG VRGSQRQPGG LAEQWFQPPN LKRAFSSSLS DSNESPAVAS
	DDPDDPDFPG SLVGQRRRRP RGSGSRNQRT LTNTPRVQRL RPRPPQKCST PCSRLRPPPF
	PNCSPGCLGS DHSVCIQSRD SNELGTSASL FSSPASPGAP DPLYADSAVP GSFHLPAASL
	SEPSVPCPQV AATGDRYTGR ALRAEASFRS SLFSLVNSGA TEENKFGTDG ENVKESCCER
	RQQMGNRLTD PDLTSPGKRK AACKKVVSQG VDQRDYEESS ACKDLRVPGE ISRPKRTGPL
	RKRKQQEATG TPPRHYHQSK KKRKASVSLW NLNTSQRDSW TKTRASFGFH KKKIITSVIE
	VCSSVASSSS RSLLSECSTP PIKNRAHLTV SSRCSSVYLL SPLKTLHVTD QRPSYAEKVY
	GECNQEGPIP FSDCLSTEKL ERCEKIGEGV FGEVFQIIND QAPVALKIIA IEGLDLVNGS
	HQKTFEEILP EIIISKELSL LSSEAYNRTE GFIGLNSVHC VQGLYPPLLL KAWDHYNTTK
	RSANDRPDFF QEDQLFIILE FEFGGVDLER MKTKLSSVAT AKSILHQITA SLAVAEASLH
	FEHRDLHWGN VLLKKTNLKE LRYTLNGKTS TIPTHGLQVN IIDYTLSRLE RDGIVVFCDI

SAEEDLFTGE GDYQFEIYRL MRKENKNCWG EYHPYNNVLW LHYLTDKILN KMKFKTKCQS AAMKQIRKNL QHFHRTVLSF SSATDLLCQH SLFR

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:	GSG2
Alternative Name:	Haspin (GSG2 Products)
Background:	Serine/threonine-protein kinase haspin (EC 2.7.11.1) (Germ cell-specific gene 2 protein) (Haploid germ cell-specific nuclear protein kinase),FUNCTION: Serine/threonine-protein kinase that phosphorylates histone H3 at 'Thr-3' (H3T3ph) during mitosis. May act through H3T3ph to both position and modulate activation of AURKB and other components of the chromosomal passenger complex (CPC) at centromeres to ensure proper chromatid cohesion, metaphase alignment and normal progression through the cell cycle. {ECO:0000250 UniProtKB:Q8TF76}.
Molecular Weight:	84.2 kDa
UniProt:	Q9Z0R0
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 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!

For Research Use only

Restrictions:

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