

Datasheet for ABIN3092770

## GFI1B Protein (AA 1-330) (Strep Tag)



[Go to Product page](#)

### Overview

Quantity:	250 µg
Target:	GFI1B
Protein Characteristics:	AA 1-330
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GFI1B protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	<p>MPRSFLVKSK KAHTYHQPRV QEDEPLWPPA LTPVPRDQAP SNSPVLSTLF PNQCLDWTNL  KREPELEQDQ NLARMAPAPE GPIVLSRPQD GDSPLSDSPP FYKPSFSWDT LATTYGHYSYR  QAPSTMQSAF LEHSVSLYGS PLVPSTEPAL DFLRYSPPGM DAYHCVKCNK VFSTPHGLEV  HVRRSHSGTR PFACDICGKT FGHAVSLEQH THVHSQERSF ECRMCGKAFK RSSTLSTHLL  IHSDTRPYPC QFCGKRFBQK SDMKKHTYIH TGEKPHKCQV CGKAFSQSSN LITHSRKHTG  FKPFSCSELCT KGFQRKVDLR RHRESQHNLK</p> <p><b>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.</b></p>
Characteristics:	Key Benefits:

## Product Details

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- 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.

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

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Target:	GFI1B
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## Target Details

Alternative Name: GFI1B ([GFI1B Products](#))

Background: Zinc finger protein Gfi-1b (Growth factor independent protein 1B) (Potential regulator of CDKN1A translocated in CML),FUNCTION: Essential proto-oncogenic transcriptional regulator necessary for development and differentiation of erythroid and megakaryocytic lineages. Component of a RCOR-GFI-KDM1A-HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development and controls hematopoietic differentiation. Transcriptional repressor or activator depending on both promoter and cell type context, represses promoter activity of SOCS1 and SOCS3 and thus, may regulate cytokine signaling pathways. Cooperates with GATA1 to repress target gene transcription, such as the apoptosis regulator BCL2L1, GFI1B silencing in leukemic cell lines markedly increase apoptosis rate. Inhibits down-regulation of MYC and MYB as well as the cyclin-dependent kinase inhibitor CDKN1A/P21WAF1 in IL6-treated myelomonocytic cells. Represses expression of GATA3 in T-cell lymphomas and inhibits GATA1-mediated transcription, as GATA1 also mediates erythroid GFI1B transcription, both GATA1 and GFI1B participate in a feedback regulatory pathway controlling the expression of GFI1B gene in erythroid cells. Suppresses GATA1-mediated stimulation of GFI1B promoter through protein interaction. Binds to gamma-satellite DNA and to its own promoter, auto-repressing its own expression. Alters histone methylation by recruiting histone methyltransferase to target genes promoters. Plays a role in heterochromatin formation. {ECO:0000269|PubMed:12351384, ECO:0000269|PubMed:16177182, ECO:0000269|PubMed:16688220, ECO:0000269|PubMed:16782810, ECO:0000269|PubMed:17156408, ECO:0000269|PubMed:17272506, ECO:0000269|PubMed:17420275}.

Molecular Weight: 37.5 kDa

UniProt: [Q5VTD9](#)

Pathways: [Cellular Response to Molecule of Bacterial Origin](#)

## 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

Application Details

modifications.

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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