



Datasheet for ABIN3090271
BMI1 Protein (AA 1-326) (Strep Tag)



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1 Image

Overview

| | |
|-------------------------------|---|
| Quantity: | 1 mg |
| Target: | BMI1 |
| Protein Characteristics: | AA 1-326 |
| Origin: | Human |
| Source: | Tobacco (Nicotiana tabacum) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This BMI1 protein is labelled with Strep Tag. |
| Application: | Western Blotting (WB), SDS-PAGE (SDS), ELISA |

Product Details

Sequence: MHRTRRIKIT ELNPHLMCVL CGGYFIDATT IIECLHSFCK TCIVRYLETS KYCPCIDVQV
HKTRPLLNIR SDKTLQDIVY KLVPGFLFKNE MKRRRDFYAA HPSADAANGS NEDRGEVADE
DKRIITDDEI ISLSIEFFDQ NRLDRKVNKD KEKSKEEVND KRYLRCPAAM TVMHLRKFLR
SKMDIPNTFQ IDVMYEEEPL KDYYTLMDIA YIYTWRNGP LPLKYRVRPT CKRMKISHQR
DGLTNAGELE SDGSDKANS PAGGIPSTSS CLPSPSTPVQ SPHPQFPHIS STMNGTSNSP
SGNHQSSFAN RPRKSSVNGS SATSSG

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 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 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.

Product Details

Endotoxin Level: Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Grade: Crystallography grade

Target Details

Target: BMI1

Alternative Name: BMI1 ([BMI1 Products](#))

Background: Polycomb complex protein BMI-1 (Polycomb group RING finger protein 4) (RING finger protein 51),FUNCTION: Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones, it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility (PubMed:15386022, PubMed:16359901, PubMed:26151332, PubMed:16714294, PubMed:21772249, PubMed:25355358, PubMed:27827373). The complex composed of RNF2, UB2D3 and BMI1 binds nucleosomes, and has activity only with nucleosomal histone H2A (PubMed:21772249, PubMed:25355358). In the PRC1-like complex, regulates the E3 ubiquitin-protein ligase activity of RNF2/RING2 (PubMed:15386022, PubMed:26151332, PubMed:21772249). {ECO:0000269|PubMed:15386022, ECO:0000269|PubMed:16359901, ECO:0000269|PubMed:16714294, ECO:0000269|PubMed:16882984, ECO:0000269|PubMed:21772249, ECO:0000269|PubMed:25355358, ECO:0000269|PubMed:26151332, ECO:0000269|PubMed:27827373}.

Molecular Weight: 36.9 kDa

UniProt: [P35226](#)

Pathways: [Cell Division Cycle, Autophagy](#)

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. 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