

Datasheet for ABIN3095414

SIN3B Protein (AA 1-1162) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	SIN3B
Protein Characteristics:	AA 1-1162
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SIN3B protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MAHAGGGSGG SGAGGPAGRG LSGARWGRSG SAGHEKLPVH VEDALTYLDQ VKIRFGSDPA TYNGFLEIMK EFKSQSIDTP GVIRRVSQLF HEHPDLIVGF NAFLPLGYRI DIPKNGKLN QSPLTSQENS HNHGDGAEDF KQQVPYKEDK PQVPLESDSV EFNNAISYVN KIKTRFLDHP EIYRSFLEIL HTYQKEQLNT RGRPFGRMSE EEVFTEVANL FRGQEDLLSE FGQFLPEAKR SLFTGNGPCE MHSVQKNEHD KPEHSRKRS RPSLLRPVSA PAKKKMKLRG TKDLSIAAVG KYGTLQEFSE FDKVRRVLKS QEVYENFLRC IALFNQELVS GSELLQLVSP FLGKFPPELFA QFKSFLGVKE LSFAPPMSEDR SGDGRISREID YASCKRIGSS YRALPKTYQQ PKCSGRTAIC KELDHWTLQ GSWTDDYCMS KFKNTCWIPG YSAGVLNDTW VSFPSWSEDS TIVSSKTPY EEQLHRCEDE RFELDVVLET NLATIRVLES VQKKLSRMAP EDQEKFRLLD SLGGTSEVIQ RRAIYRIYGD KAPEIESLK KNPVTAVPVV LKRLKAKEEE WREAQQGFNK IWREYQEKAY LKSLDHQAVN FKQNDTKALR SKSLLNEIES VYDEHQEQHS EGRSAPSSEP HLIFVYEDRQ ILEDAAALIS YYVKRQPAIQ KEDQGTIHLQ LHQFVPSLFF SQQLDLGASE ESADEDRDSP
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QGQTTPSER KKPAPGPHSS PPEEKGAFGD APATEQPPLP PPAPHKPLDD VYSLFFANN
WYFFLRHQT LCSRLKIYR QAQQLLEYR TEKEREKLLC EGRREKGS DP AMELRLKQPS
EVELEEYYP A FLDMVRSLL E GSIDPTQYED TLREMFTIHA YVGFTMDKLV QNIARQLHHL
VSDDVCLKV V ELYLNEKKRG AAGGNLSSRC VRAARETSYQ WKAERCMAD E NCFKVMFLQR
KGQVIMTIEL LDTEEAQTED PVEVQHLARY VEQYVGTEGA SSSPTEGFLL KPVFLQRNLK
KFRRRWQSEQ ARALRGEARS SWKRLVGVES ACDVDCRFKL STHKMVFIVN SEDYMYRRGT
LCRAKQVQPL VLLRHHQHFE EWHSRWLEDN VTVEAASLVQ DWLMGEEDED MVPCKTLCET
VHVHGLPVTR YRVQYSRRPA SP

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!

Product Details

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.

Endotoxin Level:

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

Grade:

Crystallography grade

Target Details

Target:

SIN3B

Alternative Name:

SIN3B ([SIN3B Products](#))

Background:

Paired amphipathic helix protein Sin3b (Histone deacetylase complex subunit Sin3b) (Transcriptional corepressor Sin3b),FUNCTION: Acts as a transcriptional repressor. Interacts with MXI1 to repress MYC responsive genes and antagonize MYC oncogenic activities. Interacts with MAD-MAX heterodimers by binding to MAD. The heterodimer then represses transcription by tethering SIN3B to DNA. Also forms a complex with FOXK1 which represses transcription. With FOXK1, regulates cell cycle progression probably by repressing cell cycle inhibitor genes expression. As part of the SIN3B complex represses transcription and counteracts the histone acetyltransferase activity of EP300 through the recognition H3K27ac marks by PHF12 and the activity of the histone deacetylase HDAC2 (PubMed:37137925). SIN3B complex is recruited downstream of the constitutively active genes transcriptional start sites through interaction with histones and mitigates histone acetylation and RNA polymerase II progression within transcribed regions contributing to the regulation of transcription (PubMed:21041482). {ECO:0000250|UniProtKB:Q62141, ECO:0000269|PubMed:21041482, ECO:0000269|PubMed:37137925}.

Target Details

Molecular Weight: 133.1 kDa

UniProt: [O75182](#)

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!

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)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process