

Datasheet for ABIN3096502

ZNF304 Protein (AA 1-659) (Strep Tag)



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Overview

Quantity:	1 mg
Target:	ZNF304
Protein Characteristics:	AA 1-659
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZNF304 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence: MAAAVLMDRV QSCVTFEDVF VYFSREEWEL LEEAQRFLYR DVMLENFALV ATLGFWCEAE
HEAPSEQSVS VEGVSQVRTA ESGLFQKAHP CEMCDPLLKD ILHLAEHQGS HLTQKLCTRG
LCRRRFSSA NFYQHQQQHN GENCFRGDDG GASFVKSTV HMLGRSFTCR EEGMDLPDSS
GLFQHQTTYN RVSPCRRETEC MESFPHSSSL RQHQQDYDQG MLFSCGDEGK AFLDTFTLLD
SQMTHAEVRP FRCLPCGNVF KEKSALINHR KIHSGEISHV CKECGKAFIH LHHLKMHQKF
HTGKRHYTCS ECGKAFSRKD TLVQHQRVHT GERSYDCSEC GKAYSRSSHL VQHQRHTGE
RPYKCNKCGK AFSRKDTLVQ HQRFHTGERP YECSECGKFF SQSSHIEHW RIHTGARPYE
CIECGKFFSH NSSLIKHRRV HTGARSYVCS KCGKAFGCKD TLVQHQQIHT GARPYECSEC
GKAFSRKDTL VQHQQIHTGE RPYECGECGK FFSHSSNLIV HQRHTGAKP YECNECGKCF
SHNSSLILHQ RVHTGARPVY CSECGKAYIS SSVLQVHKKV HTGARPYECS ECGKFFSRNS
GLILHQRVHT GEKPYVCSEC GKAYSRSSHL VRHQKAHTGE RAHECNSFGG PLAASLKLV

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
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Product Details

- 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: ZNF304

Alternative Name: ZNF304 ([ZNF304 Products](#))

Background: Zinc finger protein 304 (KRAB-containing zinc finger protein),FUNCTION: Acts as a transcriptional regulator and plays a role in gene silencing (PubMed:24623306, PubMed:26081979). Probably forms a corepressor complex required for activated KRAS-mediated promoter hypermethylation and transcriptional silencing of several tumor suppressor genes (TSGs) or other tumor-related genes in colorectal cancer (CRC) cells (PubMed:24623306). Also required to maintain a transcriptionally repressive state of genes in undifferentiated embryonic stem cells (ESCs) by inducing trimethylation of 'Lys-27' of histone H3 (H3K27me3) (PubMed:24623306) in a Polycomb group (PcG) complexes-dependent manner. Associates at promoter regions of TSGs and mediates the recruitment of the corepressor complex containing the scaffolding protein TRIM28, methyltransferase DNMT1 and histone methyltransferase SETDB1 and/or the PcG complexes at those sites (PubMed:24623306). Transcription factor involved in the metastatic cascade process by inducing cell migration and proliferation and gain resistance to anoikis of ovarian carcinoma (OC) cells via integrin-mediated signaling pathways (PubMed:26081979). Associates with the ITGB1 promoter and positively regulates beta-1 integrin transcription expression (PubMed:26081979). Promotes angiogenesis (PubMed:26081979). Promotes tumor growth (PubMed:24623306, PubMed:26081979). {ECO:0000269|PubMed:24623306, ECO:0000269|PubMed:26081979}.

Molecular Weight: 75.0 kDa

UniProt: [Q9HCX3](#)

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.

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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