

Datasheet for ABIN3095915

TNKS Protein (AA 1-1327) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	TNKS
Protein Characteristics:	AA 1-1327
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TNKS protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence:	MAASRRSQHH HHHHQQQLQP APGASAPPPP PPPPLSPGLA PGTTASPTA SGLAPFASPR HGLALPEGDG SRDPPDRPRS PDPVDGTSCC STTSTICTVA AAPVVPVAVST SSAAGVAPNP AGSGSNNSPS SSSSPTSSSS SSPSSPGSSL AESPEAAGVS STAPLPGGAA GPGTGVPVAVS GALRELLEAC RNGDVSRVKR LVDAANVNAK DMAGRKSSPL HFAAGFGRKD VVEHLLQMGA NVHARDDGGL IPLHNACSFH HAEVVSLLLC QGADPNARDN WNYTPLHEAA IKGKIDVCIV LLQHGDAPNI RNTDGKSALD LADPSAKAVL TGEYKKDELL EAARSGNEEK LMALLTPLNV NCHASDGRKS TPLHLAAGYN RVRIVQLLLQ HGADVHAKDK GGLVPLHNAC SYGHYEVTEL LLKHGACVNA MDLWQFTPLH EAASKNRVEV CSLLSHGAD PTLVNCHGKS AVDMAPTPEL RERLTYEFGK HSLLQAAREA DLAKVKKTLA LEINFKQPQ SHETALHCAV ASLHPKRKQV TELLLRKGAN VNEKNKDFMT PLHVAERAH NDVMEVLHKH GAKMNALDTL GQTALHRAAL AGHLQTCRLL LSYGSDPSII SLQGFTAAQM GNEAVQQILS ESTPIRTSDV DYRLLEASKA GDLETVKQLC SSQNVNCRDL EGRHSTPLHF AAGYNRVSVV EYLLHHGADV HAKDKGGLVP
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LHNACSYGHY EVAELLVRHG ASVNVADLWK FTPLHEAAAK GKYEICKLLL KHGADPTKKN
RDGNTPLDLV KEGDTDIQDL LRGDAALLDA AKKGCLARVQ KLCTPENINC RDTQGRNSTP
LHLAAGYNNL EVAEYLLEHG ADVNAQDKGG LIPLHNAASY GHVDIAALLI KYNTCVNATD
KWAFTPLHEA AQKGRTQLCA LLLAHGADPT MKNQEGQTPL DLATADDIRA LLIDAMPPEA
LPTCFKPQAT VVSASLISPA STPSCLSAAS SIDNLTGPLA ELAVGGASNA GDGAAGTERK
EGEVAGLDMN ISQFLKSLGL EHLRDIFETE QITLDVLADM GHEELKEIGI NAYGHRHKLI
KGVRLGGQ QGTNPYLTFH CVNQGTILLD LAPEDKEYQS VEEEMQSTIR EHRDGGNAGG
IFNRYNVIRI QKVVNKKLRE RFCHRQKEVS EENHNHHNER MLFHGSPFIN AIIHKGFDER
HAYIGGMFGA GIYFAENSSK SNQYVYGIGG GTGCPHDKDR SCYICHRQML FCRVTLGKSF
LQFSTMKMAH APPGHHSVIG RPSVNGLAYA EYVIYRGEQA YPEYLITYQI MKPEAPSQTA
TAAEQKT

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

Product Details

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.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	TNKS
Alternative Name:	TNKS (TNKS Products)
Background:	Poly [ADP-ribose] polymerase tankyrase-1 (EC 2.4.2.30) (ADP-ribosyltransferase diphtheria toxin-like 5) (ARTD5) (Poly [ADP-ribose] polymerase 5A) (Protein poly-ADP-ribosyltransferase tankyrase-1) (EC 2.4.2.-) (TNKS-1) (TRF1-interacting ankyrin-related ADP-ribose polymerase) (Tankyrase I) (Tankyrase-1) (TANK1),FUNCTION: Poly-ADP-ribosyltransferase involved in various processes such as Wnt signaling pathway, telomere length and vesicle trafficking (PubMed:10988299, PubMed:11739745, PubMed:16076287, PubMed:19759537, PubMed:21478859, PubMed:22864114, PubMed:23622245, PubMed:25043379, PubMed:28619731). Acts as an activator of the Wnt signaling pathway by mediating poly-ADP-ribosylation (PARsylation) of AXIN1 and AXIN2, 2 key components of the beta-catenin destruction complex: poly-ADP-ribosylated target proteins are recognized by RNF146, which mediates their ubiquitination and subsequent degradation (PubMed:19759537,

Target Details

PubMed:21478859). Also mediates PARsylation of BLZF1 and CASC3, followed by recruitment of RNF146 and subsequent ubiquitination (PubMed:21478859). Mediates PARsylation of TERF1, thereby contributing to the regulation of telomere length (PubMed:11739745). Involved in centrosome maturation during prometaphase by mediating PARsylation of HEPACAM2/MIKI (PubMed:22864114). May also regulate vesicle trafficking and modulate the subcellular distribution of SLC2A4/GLUT4-vesicles (PubMed:10988299). May be involved in spindle pole assembly through PARsylation of NUMA1 (PubMed:16076287). Stimulates 26S proteasome activity (PubMed:23622245). {ECO:0000269|PubMed:10988299, ECO:0000269|PubMed:11739745, ECO:0000269|PubMed:16076287, ECO:0000269|PubMed:19759537, ECO:0000269|PubMed:21478859, ECO:0000269|PubMed:22864114, ECO:0000269|PubMed:23622245, ECO:0000269|PubMed:25043379, ECO:0000269|PubMed:28619731}.

Molecular Weight: 142.0 kDa

UniProt: [O95271](#)

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

Handling

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

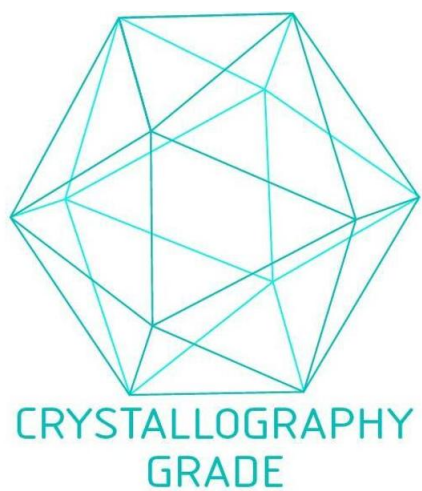


Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process