

Datasheet for ABIN3076069

ZNF598 Protein (AA 1-904) (Strep Tag)



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1 Image

Overview

Quantity:	1 mg
Target:	ZNF598
Protein Characteristics:	AA 1-904
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZNF598 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	<p>MAAAGGAEGR RAALEAAAAA APERGGGSCV LCCGDLEATA LGRCDHPVCY RCSTKMRVLC EQRYCAVCRE ELRQVVFQKK LPAFATIPIH QLQHEKKYDI YFADGKVVYAL YRQLLQHECP RCPPELPPFSL FGDLEQHMRR QHELFCCLRC LQHLQIFTYE RKWYSRKDLA RHRMQGDPDD TSHRGHPLCK FCDERYLDND ELLKHLRRDH YFCHFCDSDG AQDYYSYAY LREHFREKHF LCEEGRCSSTE QFTHAFRTEI DLKAHRTACH SRSRAEARQN RHIDLQFSYA PRHSRRNEGV VGGEDYEEVD RYSRQGRVAR AGTRGAQQSR RGSWRYKREE EDREVA AVR ASVAAQQQEE ARRSQDQEEG GRPKKEEAAA RGPEDPRGPR RSPRTQGEGP GPKETSTNGP VSQEA FSVTG PAAPGCVGVP GALPPPSPKL KDEDFPPLSA STSSSCSTAA TPGPVGLALP YAIPARGRSA FQEEDFPALV SSVPKPGTAP TSLVSAWNSS SSSKKVAQPP LSAQATGSGQ PTRKAGKGSR GGRKGGPPFT QEEEEEDGGPA LQELLSTRPT GSVSSTLGLA SIQPSKVGKK KKV GSEKPGT TLPQPPPATC PPGALQAPEA PASRAEGPVA VVNGHTEGP APARSAPKEP PGLPRPLGSF PCPTPQEDFP ALGGPCPPRM PPPPGFSAVV LLKGT P P P P P PGLVPPISKP PPGFSGLLPS</p>
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PHPACVPSPA TTTTTPAPRL LPAPRAYLVP ENFRERNLQL IQSIRDFLQS DEARFSEFKS
HSGEFRQGLI SAAQYYKSCR DLLGENFQKV FNELLVLLPD TAKQCELLSA HTDFCNREKP
LSTKSKKNKK SAWQATTQQA GLDCRVCPTC QQVLAHG DAS SHQALHAARD DDFPSLQAIA RIIT

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.

Product Details

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): <ol style="list-style-type: none">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:	ZNF598
Alternative Name:	ZNF598 (ZNF598 Products)
Background:	<p>E3 ubiquitin-protein ligase ZNF598 (EC 2.3.2.27) (Zinc finger protein 598),FUNCTION: E3 ubiquitin-protein ligase that plays a key role in the ribosome quality control (RQC), a pathway that takes place when a ribosome has stalled during translation, leading to degradation of nascent peptide chains (PubMed:28065601, PubMed:28132843, PubMed:28685749, PubMed:32579943, PubMed:32099016, PubMed:33581075). ZNF598 is activated when ribosomes are stalled within an mRNA following translation of prematurely polyadenylated mRNAs (PubMed:28065601, PubMed:28132843, PubMed:28685749). Acts as a ribosome collision sensor: specifically recognizes and binds collided di-ribosome, which arises when a trailing ribosome encounters a slower leading ribosome, leading to terminally arrest translation (PubMed:28065601, PubMed:28132843, PubMed:28685749, PubMed:30293783). Following binding to colliding ribosomes, mediates monoubiquitination of 40S ribosomal proteins RPS10/eS10 and RPS3/uS3, and 'Lys-63'-linked polyubiquitination of RPS20/uS10 (PubMed:28065601, PubMed:28132843, PubMed:28685749). Polyubiquitination of RPS20/uS10 promotes recruitment of the RQT (ribosome quality control trigger) complex, which drives the disassembly of stalled ribosomes, followed by degradation of nascent peptides (PubMed:32579943, PubMed:32099016, PubMed:36302773). E3 ubiquitin-protein ligase activity is dependent on the E2 ubiquitin-conjugating enzyme UBE2D3 (PubMed:28685749). Also acts as an adapter that recruits the 4EHP-GYF2 complex to mRNAs (PubMed:22751931, PubMed:32726578). Independently of its role in RQC, may also act as a negative regulator of interferon-stimulated gene (ISG) expression (PubMed:29719242).</p>

Target Details

{ECO:0000269|PubMed:22751931, ECO:0000269|PubMed:28065601, ECO:0000269|PubMed:28132843, ECO:0000269|PubMed:28685749, ECO:0000269|PubMed:29719242, ECO:0000269|PubMed:30293783, ECO:0000269|PubMed:32099016, ECO:0000269|PubMed:32579943, ECO:0000269|PubMed:32726578, ECO:0000269|PubMed:33581075, ECO:0000269|PubMed:36302773}., FUNCTION: (Microbial infection) Required for poxvirus protein synthesis by mediating ubiquitination of RPS10/eS10 and RPS20/uS10 (PubMed:29719242). Poxvirus encoding mRNAs contain unusual 5' poly(A) leaders and ZNF598 is required for their translational efficiency, possibly via its ability to suppress readthrough or sliding on shorter poly(A) tracts (PubMed:29719242). {ECO:0000269|PubMed:29719242}.

Molecular Weight: 98.6 kDa

UniProt: [Q86UK7](#)

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,

Handling

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