

Datasheet for ABIN3076069

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



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	ZNF598
Protein Characteristics:	AA 1-904
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZNF598 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MAAAGGAEGR RAALEAAAAA APERGGGSCV LCCGDLEATA LGRCDHPVCY RCSTKMRVLC EQRYCAVCRE ELRQVVFGKK LPAFATIPHI QLQHEKKYDI YFADGKVYAL YRQLLQHECP RCPPLPPFSL FGDLEQHMRR QHELFCCLRLC LQHLQIFTYE RKWYSRKDLA RHRMQGDPDD TSHRGHPLCK FCDERYLDND ELLKHLRRDH YFCHFCDSDG AQDYYSYAY LREHFREKHF LCEEGRCSSTE QFTHAFRTEI DLKAHRTACH SRSRAEARQN RHIDLQFSYA PRHSRRNEGV VGGEDYEEVD RYSRQGRVAR AGTRGAQQSR RGSWRYKREE EDREVAABVR ASVAAQQQEE ARRSQDQEEG GRPKKEEAAA RGPEDPRGPR RSPRTQGEGP GPKETSTNGP VSQEAQSVTG PAAPGCVGVP GALPPPSPKL KDEDFPSLSA STSSSCSTAA TPGPVGLALP YAIPARGRSA FQEEFDPALV SSVPKPGTAP TSLVSAWNSS SSSKKVAQPP LSAQATGSGQ PTRKAGKGSR GGRKGGPPFT QEEEEEDGGPA LQELLSTRPT GSVSSTLGLA SIQPSKVGKK KKVGESEKPGT TLPQPPPATC PPGALQAPEA PASRAEGPVA VVNGHTEGP APARSAPKEP PGLPRPLGSF

PCPTPQEDFP ALGGPCPPRM PPPPGFSAVV LLKGTTPPPP PGLVPPISKP PPGFSGLLPS
PHPACVPSPA TTTTTKAPRL LPAPRAYLVP ENFRERNLQL IQSIRDFLQS DEARFSEFKS
HSGEFRQGLI SAAQYYKSCR DLLGENFQKV FNELLVLLPD TAKQQELLSA HTDFCNREKP
LSTKSKKNKK SAWQATTQQA GLDCRVCPCTC QQVLAHGDAS 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 in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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 against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification: One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: ZNF598

Alternative Name: ZNF598 ([ZNF598 Products](#))

Background: 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). {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

Target Details

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.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months