

Datasheet for ABIN3136182

## CTF18 Protein (AA 1-969) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	CTF18 (CHTF18)
Protein Characteristics:	AA 1-969
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CTF18 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AlIcE®
Sequence:	<p>MEDYEEDLYG VEDDFQNQFA AELEVLAELE GTRDQAPPGT LQTPASRPPL TFEEAIAGGD</p> <p>TVPRPCPAGS PGNVNRNTRK NVRRDQPAPS SPMVKRPRLD VVKKLNFEPA MEELLYPDSP</p> <p>PGDITPPSP EVFPEMLDAG YSDANADKDL MQTLPSPRNR NPVLRRPIL EDYINVTSTS</p> <p>GERAFLVLRA DLIGPGVQNP LLDVHWRGCG QLDLLGVPFA SLKEQVDSKR RQQLLEDAQQ</p> <p>LSDTLHSLRS EGEEAVLEGP PAEEPAPGQN TAQHCLWVDE FAPQHYTELL SDDFTNRCLL</p> <p>KWLKLWDLVV FGRERPARKP RPGVETTRVG KEATAPGKWK SHEQALEEML EAELDPSQRP</p> <p>RQKVALLCGP PGLGKTTLAH VVARHAGYCV VEMNASDDRS PEAFTRTIEA ATQMESVLGV</p> <p>GGRPNCLVID EIDGAPTAI NVLLGILNRK GPQEQDQGGT AVAAGGRRRR AEGGLLTRPI</p> <p>ICICNDQFTP SLRQLKQQAL LLHVPPTLPS RLVQRLQEIS LQHGMRSDPG ALVALCEKTD</p> <p>NDIRACINTL QFLYGRGRRE LSVKAVQTTH VGLKDQRKGL FSVWQEVFQL PRTQRRIVGQ</p> <p>DLMLPAHALL LSNQDKGSLT LASQRFYHIL RVTTSSAGEHE KVVQGLFDNF LRLRLRDSSL</p>

STVCCALDWL AFDDLLEQAA HRGQSFQLLC YLPFVPAAFH VLFASSHVPR ITFPSSQQEA  
QTRMSQTRNH IQTLVSGMAP TTRSRATPQA LVLDTLCLLL DVLAPKLRPV STQLYSAHEK  
QQLSCLVGTM LAYSLTYHQE RTPDGQYLYK LEPNVEEVCR FPELPARKPL TYQAKQLIAR  
EIEMKMRRA EALAWARSGP QVDQGSSGPA SLWTDSGEKG TRQPAPRNHE QRLEHIMKRA  
TVQEQPERDF FGRVVIRKVA VPSREVEAPQ KDADEWRMGV AVGRSEVWFR FNEGVSNAVR  
RSLYIRDLL

**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.**

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### 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.

## Product Details

- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

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: CTF18 (CTHF18)

Alternative Name: Chtf18 ([CTHF18 Products](#))

Background: Chromosome transmission fidelity protein 18 homolog,FUNCTION: Chromosome cohesion factor involved in sister chromatid cohesion and fidelity of chromosome transmission. Component of one of the cell nuclear antigen loader complexes, CTF18-replication factor C (CTF18-RFC), which consists of CTF18, CTF8, DCC1, RFC2, RFC3, RFC4 and RFC5. The CTF18-RFC complex binds to single-stranded and primed DNAs and has weak ATPase activity that is stimulated by the presence of primed DNA, replication protein A (RPA) and by proliferating cell nuclear antigen (PCNA). The CTF18-RFC complex catalyzes the ATP-dependent loading of PCNA onto primed and gapped DNA. Interacts with and stimulates DNA polymerase POLH. During DNA repair synthesis, involved in loading DNA polymerase POLE at the sites of local damage. {ECO:0000250|UniProtKB:Q8WVB6}.

Molecular Weight: 108.1 kDa

UniProt: [Q8BIW9](#)

## 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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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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months