

Datasheet for ABIN3091929

CPSF1 Protein (AA 1-1443) (Strep Tag)**1** Image[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	CPSF1
Protein Characteristics:	AA 1-1443
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CPSF1 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Sequence:	MYAVYKQAFP PTGLEFSMYC NFFNNSERNL VVAGTSQLYV YRLNRDAEAL TKNDRSTEGK AHREKLELAA SFSFFGNVMS MASVQLAGAK RDALLSFKD AKLSVVEYDP GTHDLKTLSTL HYFEEPELRD GFVQNVHTPR VRVDPDGRCA AMLVYGTRLV VLPFRRESLA EEHEGLVGE QRSSFLPSYI IDVRALDEKL LNIIDLQLFH GYYEPTLLIL FEPNQTPWGR VAVRQDTC VAISLNITQK VHPVIWSLTS LPFDCTQALA VPKPIGGVVV FAVNSLLYLN QSVPPYGV NSLTTGTAF PLRTQEGVRI TLDCATFI SYDKMVISLK GGEIYVLTLI TDGMRSVRAF HFDKAAASVL TTSMVTMEPG YLFLGSRLGN SLLKYTEKL QEPPASAVRE AADKEEPPSK KKRVDATAGW SAAGKSVPQD EVDEIEVYGS EAQSGTQLAT YSFEVCD SIL NIGPCANA AV GEPAFLSEEF QNSPEPDLEI VVCSGHGKNG ALSVLQKSIR PQVVTTFELP GCYDMWTVIA PVRKEEEDNP KGEGTEQEPS TTPEADDDGR RHGFLILSRE DSTMILQTGQ EIMELDTSGF ATQGPTVFAG NIGDNRYIVQ VSPLGIRLLE GVNQLHFIPV DLGAPIVQCA VADPYVVIMS AEGHVMTMFL KSDSYGGRHH RLALHKPPLH HQSKVITLCL YRDLSGMFTT ESRLGGARDE
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LGGRSGPEAE GLGSETSPTV DDEEEMLYGD SGSLFSPSKE EARRSSQPPA DRDPAPFRAE
PTHWCLLVRE NGTMEIYQLP DWRLVFLVKN FPGVQRVLVD SSFGQPTTQG EARREEATRQ
GELPLVKEVL LVALGSRQSR PYLLVHVDQE LLIYEAFPHD SQLGQGNLKV RFKKVPHNIN
FREKKPKPSK KKAEGGGAEE GAGARGRVAR FRYFEDIYGY SGVFICGPSP HWLLVTGRGA
LRLHPMAIDG PVDSFAPFHN VNCPRGFLYF NRQGELRISV LPAYLSYDAP WPVRKIPLRC
TAHYVAYHVE SKVYAVATST NTPCARIPRM TGEEKEFETI ERDERYIHPQ QEAFSIQLIS
PVSWEAIPNA RIELQEWEHV TCMKTVSLRS EETVSGLGKY VAAGTCLMQG EEVTCRGRIL
IMDVIEVVPE PGQPLTKNKF KVLYEKEQKG PVTALCHCNG HLVSAGQKI FLWSLRASEL
TGMAFIDTQL YIHQMISVKN FILAADVMKS ISLLRYQEEES KTLSSLVSRDA KPLEVYSVDF
MVDNAQLGFL VSDRDRNLMV YMYLPEAKES FGGMRLLRRA DFHVGAHVNT FWRTPCRGAT
EGLSKKSVVW ENKHITWFAT LDGGIGLLLP MQEKTYRRL MLQNALTTML PHHAGLNRA
FRMLHVDRT LQNAVRNVLG GELLNRYLYL STMERSELAK KIGTTPDIIL DDLLETDRVT AHF

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

Product Details

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 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:	CPSF1
Alternative Name:	CPSF1 (CPSF1 Products)
Background:	Cleavage and polyadenylation specificity factor subunit 1 (Cleavage and polyadenylation specificity factor 160 kDa subunit) (CPSF 160 kDa subunit),FUNCTION: Component of the cleavage and polyadenylation specificity factor (CPSF) complex that plays a key role in pre-mRNA 3'-end formation, recognizing the AAUAAA signal sequence and interacting with poly(A) polymerase and other factors to bring about cleavage and poly(A) addition. This subunit is involved in the RNA recognition step of the polyadenylation reaction (PubMed:14749727). May play a role in eye morphogenesis and the development of retinal ganglion cell projections to the midbrain (By similarity). {ECO:0000250 UniProtKB:A0A0R4IC37, ECO:0000269 PubMed:14749727}.

Target Details

Molecular Weight: 160.9 kDa

UniProt: [Q10570](#)

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, 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