Datasheet for ABIN3091912

CPSF3 Protein (AA 2-684) (His tag)

1	Image

Overview

Quantity:	1 mg
Target:	CPSF3
Protein Characteristics:	AA 2-684
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CPSF3 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	SAIPAEESDQ LLIRPLGAGQ EVGRSCIILE FKGRKIMLDC GIHPGLEGMD ALPYIDLIDP AEIDLLLISH FHLDHCGALP WFLQKTSFKG RTFMTHATKA IYRWLLSDYV KVSNISADDM LYTETDLEES MDKIETINFH EVKEVAGIKF WCYHAGHVLG AAMFMIEIAG VKLLYTGDFS RQEDRHLMAA EIPNIKPDIL IIESTYGTHI HEKREEREAR FCNTVHDIVN RGGRGLIPVF ALGRAQELLL ILDEYWQNHP ELHDIPIYYA SSLAKKCMAV YQTYVNAMND KIRKQININN PFVFKHISNL KSMDHFDDIG PSVVMASPGM MQSGLSRELF ESWCTDKRNG VIIAGYCVEG TLAKHIMSEP EEITTMSGQK LPLKMSVDYI SFSAHTDYQQ TSEFIRALKP PHVILVHGEQ NEMARLKAAL IREYEDNDEV HIEVHNPRNT EAVTLNFRGE KLAKVMGFLA DKKPEQGQRV SGILVKRNFN YHILSPCDLS NYTDLAMSTV KQTQAIPYTG PFNLLCYQLQ KLTGDVEELE IQEKPALKVF KNITVIQEPG MVVLEWLANP SNDMYADTVT TVILEVQSNP KIRKGAVQKV SKKLEMHVYS KRLEIMLQDI FGEDCVSVKD DSILSVTVDG KTANLNLETR TVECEEGSED DESLREMVEL AAQRLYEALT PVH

Product Details

	Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Human CPSF3 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • 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. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. 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. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

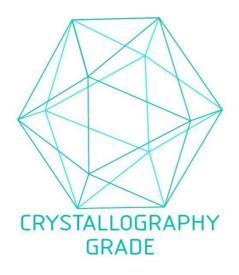|	
Target:	CPSF3
Alternative Name:	CPSF3 (CPSF3 Products)
Background:	Component of the cleavage and polyadenylation specificity factor (CPSF) complex that play a key role in pre-mRNA 3'-end formation, recognizing the AAUAAA signal sequence and interacting with poly(A) polymerase and other factors to bring about cleavage and poly(A) addition. Has endonuclease activity, and functions as mRNA 3'-end-processing endonuclease. Also involved in the histone 3'-end pre-mRNA processing. U7 snRNP-dependent protein that induces both the 3'-endoribonucleolytic cleavage of histone pre-mRNAs and acts as a 5' to 3' exonuclease for degrading the subsequent downstream cleavage product (DCP) of mature histone mRNAs. Cleavage occurs after the 5'-ACCCA-3' sequence in the histone pre-mRNA leaving a 3'hydroxyl group on the upstream fragment containing the stem loop (SL) and 5' phosphate on the downstream cleavage product (DCP) starting with CU nucleotides. The U7-dependent 5' to 3' exonuclease activity is processive and degrades the DCP RNA substrate even after complete removal of the U7-binding site. Binds to the downstream cleavage product (DCP) of histone pre-mRNAs and the cleaved DCP RNA substrate in a U7 snRNP dependent manner. {ECO:0000269|PubMed:14749727, ECO:0000269|PubMed:15037765, ECO:0000269|PubMed:17128255, ECO:0000269|PubMed:18688255}.
Molecular Weight:	78.3 kDa Including tag.
UniProt:	Q9UKF6

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 gurantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid

Handling

Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
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