

Datasheet for ABIN3095021

RFC1 Protein (AA 1-1148) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	RFC1
Protein Characteristics:	AA 1-1148
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RFC1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MDIRKFFGVI PSGKKLVSET VKKNEKTKSD EETLKAKKGI KEIKVNSSRK EDDFKQKQPS</p> <p>KKKRIIYDSD SESEETLQVK NAKKPPEKLP VSSKPGKISR QDPVTYISET DEEDDFMCKK</p> <p>AASKSKENGR STNSHLGTSN MKKNEENTKT KNKPLSPIKL TPTSVLDYFG TGSVQRSNKK</p> <p>MVASKRKELS QNTDESLND EAIKQLQLD EDAELERQLH EDEEFARTLA MLDEEPPKTKK</p> <p>ARKDTEAGET FSSVQANLSK AEKHKYPHKV KTAQVSDERK SYSPRKQSKY ESSKESQQHS</p> <p>KSSADKIGEV SSPKASSKLA IMKRKEESSY KEIEPVASKR KENAIKLKGE TKTPKKTSS</p> <p>PAKKESVSPE DSEKKRTNYQ AYRSYLNREG PKALGSKEIP KGAENCLEGL IFVITGVLES</p> <p>IERDEAKSLI ERYGGKVTGN VSKKTNLYVM GRDSGQSKSD KAAALGTKII DEDGLLNLR</p> <p>TMPGKKSKE IAVETEMKKE SKLERTPQKN VQGKRKISPS KKESESKSKR PTSKRDSLAK</p> <p>TIKKETDVFW KSLDFKEQVA EETSGDSKAR NLADDSSSENK VENLLWVDKY KPTSLKTIIG</p> <p>QQGDQSCANK LLRWLRNWQK SSSSEDKKHAA KFGKFSGKDD GSSFKAALLS GPPGVGKTTT</p>

ASLVCQELGY SYVELNASDT RSKSSLKAIV AESLNNTSIK GFYSNGAASS VSTKHALIMD
EVDGMAGNED RGGIQELIGL IKHTKIPIIC MCNDRNHPKI RSLVHYCFDL RFQRPRVEQI
KGAMMSIAFK EGLKIPPPAM NEILGANQD IRQVLHNLSM WCARSKALTY DQAKADSHRA
KKDIKMGPFD VARKVFAAGE ETAHMSLVDK SDLFFHDYSI APLFVQENYI HVKPVAAGGD
MKKHLMLLSR AADSICDGD L VDSQIRSKQN WSLPAQAIY ASVLPGELMR GYMTQFPTFP
SWLGKHSSTG KHDRIVQDLA LHMSLRITYSS KRTVNMDYLS LLRDALVQPL TSQGVDGVQD
VVALMDTYYL MKEDFENIME ISSWGGKPSP FSKLDPKVKA AFTRAYNKEA HLTPYSLQAI
KASRHSTSPS LDSEYNEELN EDDSQSDEKD QDAIETDAMI KKKTKSSKPS KPEKDKEPRK
GKGKSSKK

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!

Product Details

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.

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: RFC1

Alternative Name: RFC1 ([RFC1 Products](#))

Background: Replication factor C subunit 1 (Activator 1 140 kDa subunit) (A1 140 kDa subunit) (Activator 1 large subunit) (Activator 1 subunit 1) (DNA-binding protein PO-GA) (Replication factor C 140 kDa subunit) (RF-C 140 kDa subunit) (RFC140) (Replication factor C large subunit),FUNCTION: The elongation of primed DNA templates by DNA polymerase delta and epsilon requires the action of the accessory proteins PCNA and activator 1. This subunit binds to the primer-template junction. Binds the PO-B transcription element as well as other GA rich DNA sequences. Could play a role in DNA transcription regulation as well as DNA replication and/or repair. Can bind single- or double-stranded DNA. {ECO:0000269|PubMed:8999859}., FUNCTION: Interacts with C-terminus of PCNA. 5' phosphate residue is required for binding of the N-terminal DNA-binding domain to duplex DNA, suggesting a role in recognition of non-primer template DNA structures during replication and/or repair. {ECO:0000269|PubMed:8999859}.

Molecular Weight: 128.3 kDa

UniProt: [P35251](#)

Pathways: [Telomere Maintenance](#), [DNA Damage Repair](#), [DNA Replication](#), [Synthesis of DNA](#), [Dicarboxylic Acid Transport](#)

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

Application Details

guarantee though.

Comment:

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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 **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