

Datasheet for ABIN3095021 RFC1 Protein (AA 1-1148) (His tag)



[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	RFC1
Protein Characteristics:	AA 1-1148
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RFC1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	<p>MDIRKFFGVI PSGKKLVSET VKKNEKTKSD EETLKAKKGI KEIKVNSSRK EDDFKQKQPS</p> <p>KKKRRIYDSD 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 TKTPKTKTKSS</p> <p>PAKKESVSPE DSEKKRTNYQ AYRSYLNREG PKALGSKEIP KGAENCLEGL IFVITGVLES</p> <p>IERDEAKSLI ERYGGKVTGN VSKKTNLYVM GRDSGQSKSD KAAALGTKII DEDGLLNLIR</p> <p>TMPGKSKSYE IAVETEMKKE SKLERTPQKN VQGKRKISPS KKESESKKSR PTSKRDSLAK</p> <p>TIKKETDVFW KSLDFKEQVA EETSGDSKAR NLADDSSSENK VENLLWVDKY KPTSLKTIIG</p> <p>QQGDQSCANK LLRWLRNWQK SSSSEDKKHAA KFGKFSGKDD GSSFKAALLS GPPGVGKTTT</p> <p>ASLVCQELGY SYVELNASDT RSKSSLKAIV AESLNNTSIK GFYSNGAASS VSTKHALIMD</p>
-----------	---

EV DGMAGNED RGGIQELIGL IKHTKIPIIC MCNDRNHPKI RSLVHYCFDL RFQRPRVEQI
KGAMMSIAFK EGLKIPPPAM NEILGANQD IRQVLHNLSM WCARSKALTY DQAKADSHRA
KKDIKMGPFD VARKVFAAGE ETAHMSLVDK SDLFFHDYSI APLFVQENYI HVKPVAAGGD
MKKHLMLLSR AADSICDGD L VDSQIRSKQN WSLIPAQAIY ASVLP GELMR GYMTQFPTFP
SWLGKHSSTG KHDRIVQDLA LHMSLR TYSS KRTVNMDYLS LLRDALVQPL TSQGV DGVQD
VVALMDTYYL MKEDFENIME ISSWGGKPSP FSKLDPKVKA AFTRAYNKEA HLT PYSLQAI
KASRHSTSPS LDSEYNEELN EDDSQSDEKD QDAIETDAMI KKKTKSSKPS KPEKDKEPRK
GKGKSSKK

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 RFC1 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 receipt 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.

Product Details

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: RFC1

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

Background: 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}., 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: 129.2 kDa Including tag.

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 guarantee 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

Application Details

	receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
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