

Datasheet for ABIN7564755 RPA1 Protein (AA 1-623) (His tag)



Overview

Quantity:	1 mg
Target:	RPA1
Protein Characteristics:	AA 1-623
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RPA1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Purpose:	Custom-made recombinat Rpa1 Protein expressed in mammalien cells.
Sequence:	MVGHLSEGAI EVMIQQENTS IKPILQVINI RPISTGNRSP RYRLLMSDGL NTLSSFMLAT
	QLNTLVEGGQ LASNCVCQVH KFIVNTLKDG RKVVVLMDLE VMKSAEDVGL KIGNPVPYNE
	GYGQQQQQQ QQQQAVPSP ASAATPPASK PQPQNGSLGM GSTAAKAYGA SKPFGKPAGT
	GLLQPSGGTQ SKVVPIASLT PYQSKWTICA RVTNKSQIRT WSNSRGEGKL FSLELVDESG
	EIRATAFNEQ VDKFFPLIEV NKVYYFSKGA LKIANKQFSA VKNDYEMTFN NETSVLPCED
	GHHLPTVQFD FTGIGDLESK AKDALVDIIG ICKSYEDSIK ITVKSNNREV AKRNIYLMDM
	SGKVVTTTLW GEDADKFDGS RQPVMAIKGA RVSDFGGRSL SVLSSSTVIV NPDIPEAYKL
	RGWFDSEGQA LDGVSISDHR SGGAGGGNTN WKTLHEAKSE NLGQGDKADY FSTVAAVVFL
	RKENCMYQAC PTQDCNKKVI DQQNGLYRCE KCDREFPNFK YRMILSANIA DFQENQWVTC
	FQESAEAILG QNTMYLGELK EKNEQAFEEV FQNANFRSFT FRIRVKLETY NDESRIKATV
	MDVKPVDFRD YGRRLIANIR KNM Sequence without tag. The proposed Purification-Tag is

based on experiences 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 to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:

RPA1

Alternative Name:

Rpa1 (RPA1 Products)

Background:

Replication protein A 70 kDa DNA-binding subunit (RP-A p70) (Replication factor A protein 1) (RF-A protein 1),FUNCTION: As part of the heterotrimeric replication protein A complex (RPA/RP-A), binds and stabilizes single-stranded DNA intermediates, that form during DNA replication or upon DNA stress. It prevents their reannealing and in parallel, recruits and activates different proteins and complexes involved in DNA metabolism. Thereby, it plays an essential role both in DNA replication and the cellular response to DNA damage. In the cellular response to DNA damage, the RPA complex controls DNA repair and DNA damage checkpoint activation. Through recruitment of ATRIP activates the ATR kinase a master regulator of the DNA damage response. It is required for the recruitment of the DNA double-strand break repair factors RAD51 and RAD52 to chromatin in response to DNA damage. Also recruits to sites of DNA damage proteins like XPA and XPG that are involved in nucleotide excision repair and is

Target Details

Expiry Date:

12 months

rarget Details	
	required for this mechanism of DNA repair. Also plays a role in base excision repair (BER) probably through interaction with UNG. Also recruits SMARCAL1/HARP, which is involved in replication fork restart, to sites of DNA damage. May also play a role in telomere maintenance. {ECO:0000250 UniProtKB:P27694}.
Molecular Weight:	69.0 kDa
UniProt:	Q8VEE4
Pathways:	Telomere Maintenance, DNA Damage Repair, Mitotic G1-G1/S Phases, DNA Replication, Chromatin Binding, Synthesis of DNA
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.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.