

Product datasheet for TP509516

OriGene Technologies, Inc.

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Rpa1 (NM 026653) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse replication protein A1 (Rpa1), with C-terminal

MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA Clone >MR209516 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MVGHLSEGAIEVMIQQENTSIKPILQVINIRPISTGNRSPRYRLLMSDGLNTLSSFMLATQLNTLVEGGQ LASNCVCQVHKFIVNTLKDGRKVVVLMDLEVMKSAEDVGLKIGNPVPYNEGYGQQQQQQQQQQQQQV

PSP

ASAATPPASKPQPQNGSLGMGSTAAKAYGASKPFGKPAGTGLLQPSGGTQSKVVPIASLTPYQSKWTICA RVTNKSQIRTWSNSRGEGKLFSLELVDESGEIRATAFNEQVDKFFPLIEVNKVYYFSKGALKIANKQFSA VKNDYEMTFNNETSVLPCEDGHHLPTVQFDFTGIGDLESKAKDALVDIIGICKSYEDSIKITVKSNNREV AKRNIYLMDMSGKVVTTTLWGEDADKFDGSRQPVMAIKGARVSDFGGRSLSVLSSSTVIVNPDIPEAYKL RGWFDSEGQALDGVSISDHRSGGAGGGNTNWKTLHEAKSENLGQGDKADYFSTVAAVVFLRKENCMYQ

 AC

PTQDCNKKVIDQQNGLYRCEKCDREFPNFKYRMILSANIADFQENQWVTCFQESAEAILGQNTMYLGELK

EKNEQAFEEVFQNANFRSFTFRIRVKLETYNDESRIKATVMDVKPVDFRDYGRRLIANIRKNM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK

Predicted MW: 69 kDa

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.





Rpa1 (NM_026653) Mouse Recombinant Protein - TP509516

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 080929

 Locus ID:
 68275

 UniProt ID:
 Q8VEE4

 RefSeq Size:
 3058

Cytogenetics: 11 45.79 cM

RefSeq ORF: 1869

Synonyms: 70kDa; 5031405K23Rik; AA589576; AW557552; RF-A; RP-A; Rpa

Summary: 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 required for this mechanism of DNA repair. Plays also 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.[UniProtKB/Swiss-Prot Function]