

A3367

Leader in Biomolecular Solutions for Life Science



# RPA70/RPA1 Rabbit mAb

Catalog No.: A3367

Recombinant

2 Publications

## Basic Information

### Observed MW

70kDa

### Calculated MW

68kDa

### Category

SMab Recombinant Monoclonal  
Antibody

### Applications

WB,IP,ChIP,ELISA

### Cross-Reactivity

Human,Rat

### CloneNo number

ARC0773

## Background

This gene encodes the largest subunit of the heterotrimeric Replication Protein A (RPA) complex, which binds to single-stranded DNA (ssDNA), forming a nucleoprotein complex that plays an important role in DNA metabolism, being involved in DNA replication, repair, recombination, telomere maintenance, and co-ordinating the cellular response to DNA damage through activation of the ataxia telangiectasia and Rad3-related protein (ATR) kinase. The nucleoprotein complex protects the single-stranded DNA from nucleases, prevents formation of secondary structures that would interfere with repair, and co-ordinates the recruitment and departure of different genome maintenance factors. This subunit contains four oligonucleotide/oligosaccharide-binding (OB) domains, though the majority of ssDNA binding occurs in two of these domains. The heterotrimeric complex has two different modes of ssDNA binding, a low-affinity and high-affinity mode, determined by which ssDNA binding domains are utilized. The different binding modes differ in the length of DNA bound and in the proteins with which it interacts, thereby playing a role in regulating different genomic maintenance pathways.

## Recommended Dilutions

**WB** 1:500 - 1:2000**IP** 0.5µg-4µg antibody for  
200µg-400µg extracts  
of whole cells**ELISA** Recommended starting  
concentration is 1  
µg/mL. Please optimize  
the concentration  
based on your specific  
assay requirements.**ChIP** 5µg antibody for  
10µg-15µg of  
Chromatin

## Contact

[www.abclonal.com](http://www.abclonal.com)

## Immunogen Information

**Gene ID**  
6117**Swiss Prot**  
P27694

### Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

### Synonyms

HSSB; RF-A; RP-A; REPA1; RPA70; MST075; PFBMFT6; RPA70/RPA1

## Product Information

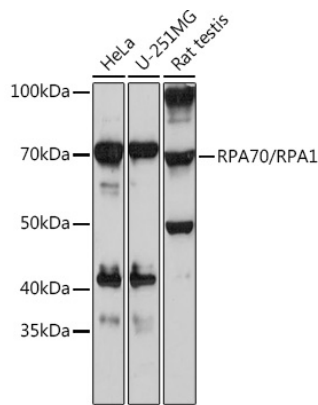
**Source**  
Rabbit**Isotype**  
IgG**Purification**  
Affinity purification

### Storage

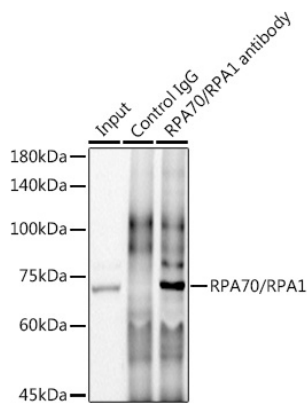
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.

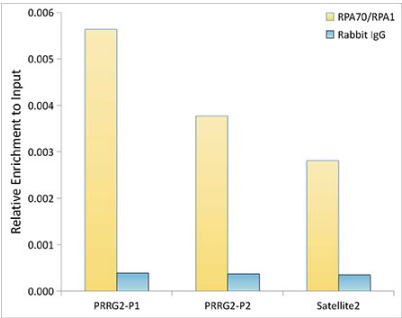
Validation Data



Western blot analysis of various lysates using RPA70/RPA1 Rabbit mAb (A3367) at 1 : 1000 dilution.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 30s.



Immunoprecipitation analysis of 300 µg extracts of HeLa cells using 3 µg RPA70/RPA1 antibody (A3367). Western blot was performed from the immunoprecipitate using RPA70/RPA1 antibody (A3367) at a dilution of 1:1000.



Chromatin immunoprecipitation analysis of extracts of HeLa cells, using RPA70/RPA1 Rabbit mAb antibody (A3367) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.