



**ABCLONAL BIOTECHNOLOGY, INC.**

## RPA70 Rabbit pab Antibody

### Anti RPA70 antibody

<b>Catalog Number:</b>	A0874	<b>Quantity:</b>	100ul
<b>Lot Number:</b>	A00009	<b>Species:</b>	Rabbit
<b>Gene ID:</b>	6117	<b>Swiss Prot:</b>	P27694

### DESCRIPTION

<b>Description</b>	Rabbit polyclonal to Human RPA70
<b>Species</b>	Rabbit
<b>Applications</b>	WB IHC ICC IP FC
<b>Reactivity</b>	H
<b>Immunogen</b>	A synthetic peptide of human RPA70
<b>Other Name</b>	RPA1; HSSB ;MST075 ; REPA1 ;RF-A ; RP-A ;RPA70;Replication protein A 70 kDa DNA-binding subunit ; Single-stranded DNA-binding protein ;

### PROPERTIES

<b>Form</b>	Liquid
<b>Storage instructions</b>	Upon delivery aliquot and store at -20°C or -80°C.
<b>Storage buffer</b>	PBS with 0.1% Sodium Azide, 50% Glycerol,
<b>Purity</b>	Affinity purification
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### APPLICATION

<b>WB</b>	WB :1/500-1000
<b>IHC</b>	IHC:1/50-100
<b>ICC</b>	ICC:1/50-100
<b>IP</b>	IP:1/10-50
<b>FC</b>	FC:1/10-50



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### BACKGROUND

RPA70 (HSSB, REPA1, RF-A, RP-A, p70) is a component of a heterotrimeric complex, composed of 70, 32/30 and 14 kDa subunits, collectively known as RPA. RPA is a single stranded DNA binding protein, whose DNA binding activity is believed to reside entirely in the 70 kDa subunit. The complex is required for almost all aspects of cellular DNA metabolism such as DNA replication (1-3), recombination, cell cycle and DNA damage checkpoints, and all major types of DNA repair including nucleotide excision, base excision, mismatch and double-strand break repairs (4-7). In response to genotoxic stress in eukaryotic cells, RPA has been shown to associate with the Rad9/Rad1/Hus1 (9-1-1) checkpoint complex (8). RPA is hyperphosphorylated upon DNA damage or replication stress by checkpoint kinases including ataxia telangiectasia mutated (ATM), ATM and Rad3-related (ATR), and DNA-dependent protein kinase (DNA-PK) (9-11). Hyperphosphorylation may alter RPA-DNA and RPA-protein interactions. In addition to the checkpoint partners, RPA interacts with a wide variety of protein partners, including proteins required for normal replication such as RCF, PCNA and Pol  $\alpha$ , and also proteins involved in SV40 replication, such as DNA polymerase I and SV40 large T antigen (10,12).

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