

## PRODUCT DATA SHEET

Bioworld Technology, Inc.

# **RPA1** polyclonal antibody

Catalog: BS60446 Host: Rabbit Reactivity: Human, Mouse, Rat

### **BackGround:**

The single-stranded-DNA-binding proteins (SSBs) are essential for DNA function in prokaryotic and eukaryotic cells, mitochondria, phages and viruses. Replication protein A (RPA), a highly conserved eukaryotic protein, is a hetero-trimeric SSB. RPA plays an important role in DNA replication, recombination and repair. The binding of human RPA (hRPA) to DNA involves molecular polarity in which initial hRPA binding occurs on the 5' side of an ssDNA substrate and then extends in the 3' direction to create a stably bound hRPA. RPA is a major damage-recognition protein involved in the early stages of nucleotide excision repair. It can also play a role in telomere maintenance. The RPA 70 kDa subunit binds to ssDNA and mediates interactions with many cellular and viral proteins. The DNA binding domain lies in the middle of RPA 70 kDa subunit and comprises two structurally homologous subdomains oriented in tandem. RPA contains a conserved four cysteine-type zinc-finger motif, which mediates the transition of RPA-ssDNA interaction to a stable RPA-ssDNA complex in a redox-dependent manner.

#### **Product:**

1 mg/ml in Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2.

## **Molecular Weight:**

~ 195 kDa

#### **Swiss-Prot:**

#### P27694

## **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

## **Applications:**

WB: 1:500~1:1000

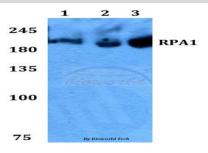
## **Storage&Stability:**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at -20  $\mathrm{C}$  long term. Avoid freeze-thaw cycles.

## **Specificity:**

RPA1 polyclonal antibody detects endogenous levels of RPA1 protein.

### **DATA:**



Western blot (WB) analysis of RPA1 polyclonal antibody at 1:500 dilution

Lane1:HEK293T whole cell lysate

Lane2:Raw264.7 whole cell lysate

Lane3:PC12 whole cell lysate

# Note:

For research use only, not for use in diagnostic procedure.

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