

# **RFA2 Monoclonal Antibody**

### Description

Product type Antibody

Code BT-MCA2782

Host Mouse

Isotype Mouse IgG1,kappa

Size  $100\mu L$ ,  $50\mu L$ 

Immunogen Purified recombinant fragment of human RFA2 expressed in E. Coli.

Mol wt 29kDa

Species reactivity Human

Clonality Monoclonal

Recommended application WB,IHC,FCM

Concentration N/A

 $\textbf{Full name} \hspace{1cm} N/A$ 

Synonyms RP-A p34, RPA2, REPA2, RPA32, RPA34

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

# Background

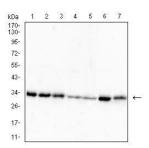
This gene encodes a subunit of the heterotrimeric Replication Protein A (RPA) complex, which binds to single-stranded DNA (ssDNA), forming a nucleoprotein complex that plays an important role in DNA metabolism, being involved in DNA replication, repair, recombination, telomere maintenance, and co-ordinating the cellular response to DNA damage through activation of the ataxia telangiectasia and Rad3-related protein (ATR) kinase. The RPA complex protects 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. The heterotrimeric complex has two different modes of ssDNA binding, a low-affinity and high-affinity mode, determined by which oligonucleotide/oligosaccharide-binding (OB) domains of the complex are utilized, and differing in the length of DNA bound. This subunit contains a single OB domain that participates in high-affinity DNA binding and also contains a winged helix domain at its carboxy terminus, which interacts with many genome maintenance protein. Post-translational modifications of the RPA complex also plays a role in coordinating different damage response pathways.

# Recommended Dilution

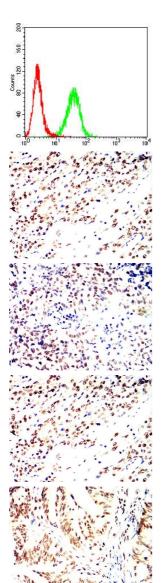
WB: 1:500 - 1:2000 IHC-p: 1:200 - 1:1000 FCM: 1:200 - 1:400

Not yet tested in other applications.

#### **Images**



Western blot analysis using RFA2 mouse mAb against Hela (1), MCF-7 (2), T47D (3), Ramos (4), HEK293 (5), HepG2 (6) and A431 (7) cell lysate.



Flow cytometric analysis of Hela cells using RFA2 mouse mAb (green) and negative control (red).

Immunohistochemical analysis of paraffin-embedded human liver tissues using RFA2 mouse mAb with DAB staining.

Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using RFA2 mouse mAb with DAB staining.

Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using RFA2 mouse mAb with DAB staining.

Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using RFA2 mouse mAb with DAB staining.

## Storage

Store at  $4^{\circ}\text{C}$  short term. Aliquot and store at -20°C long term.