

RPA1 Polyclonal Antibody

Catalog No. E-AB-64035

Note: Centrifuge before opening to ensure complete recovery of vial contents.

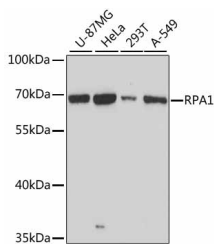
Description

Reactivity	Human
Immunogen	Recombinant fusion protein of human RPA1 (NP_002936.1).
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Conjugation	Unconjugated
Buffer	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Applications Recommended Dilution

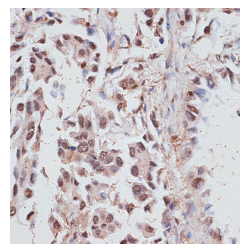
WB	1:500-1:2000
IHC	1:50-1:100

Data

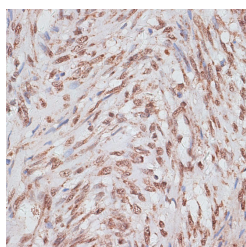


Western blot analysis of extracts of various cell lines using RPA1 Polyclonal Antibody at dilution of 1:3000.

Observed Mw:70kDa
Calculated Mw:68kDa



Immunohistochemistry of paraffin-embedded Human lung cancer using RPA1 Polyclonal Antibody at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded Human uterus using RPA1 Polyclonal Antibody at dilution of 1:100 (40x lens).

Preparation & Storage

For Research Use Only

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

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.