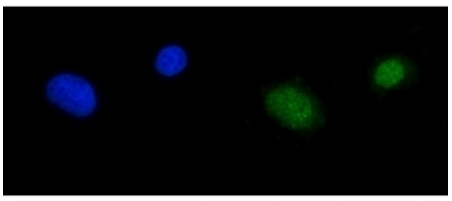
RPA1 Antibody (R32042)

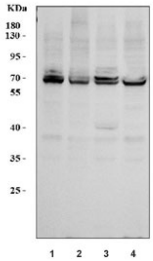
Catalog No.	Formulation	Size
R32042	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

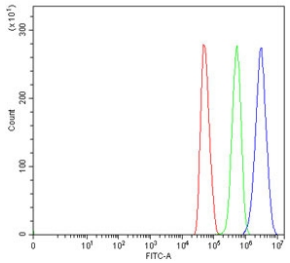
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P27694
Applications	Western blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This RPA1 antibody is available for research use only.



Immunofluorescent staining of FFPE human A549 cells with RPA1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) K562, 3) HepG2 and 4) 293T cell lysate with RPA1 antibody. Expected molecular weight ~70 kDa. A slightly larger acetylated form is sometimes observed.



Flow cytometry testing of human U-251 cells with RPA1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= RPA1 antibody.

Description

Replication protein A 70 kDa DNA-binding subunit is a protein that in humans is encoded by the RPA1 gene. This gene is mapped to chromosome 17p13.3. Replication protein A (RPA) is a heterotrimeric single-strand DNA (ssDNA)-binding protein essential for DNA replication, repair, and recombination. It is composed of 70-kD (RPA1), 32-kD (RPA2), and 14-kD (RPA3) subunits. The RPA1 subunit is responsible for high-affinity ssDNA binding. The RPA complex was originally isolated as a factor essential for in vitro replication of the papovavirus SV40. It had been found that recombinant human RPA1, purified from bacteria, exhibited ssDNA-binding activity comparable to that of the complete RPA complex. RPA1 could substitute for the complete complex in stimulating the activity of DNA polymerase alpha-primase, but it could not substitute for the complete complex in SV40 DNA replication in vitro, suggesting an important functional role for the other subunits.

Application Notes

Optimal dilution of the RPA1 antibody should be determined by the researcher.

Immunogen

Amino acids QESAEAILGQNAAYLGELKDKNEQAFEEVFQNANFR of human RPA1 were used as the immunogen for the RPA1 antibody.

Storage

After reconstitution, the RPA1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com
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