

Product Name: KD-Validated Replication Protein A2 Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA01834

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000
Molecular Weight	Calculated MW: 29.2kDa

Antigen Information

Gene Name	RPA2 RPA2; Replication Protein A2; Replication Protein A 32 KDa Subunit; Replication Protein A 34
Alternative Names	KDa Subunit; Replication Factor A Protein; RF-A Protein; RP-A P32; RP-A P34; REPA2; RPA32; Replication Protein A2 (32kD); Replication Protein A2, 32kDa; RPA34
Gene ID	6118.0
SwissProt ID	P15927
Immunogen	A synthesized peptide derived from human RFA2

Background

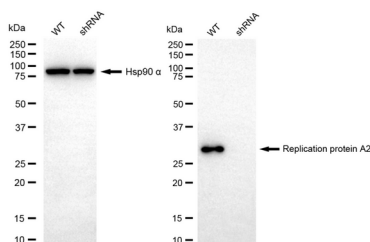
This gene encodes a subunit of the heterotrimeric Replication Protein A (RPA) complex, which binds to single-stranded DNA

(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 co-ordinating different damage response pathways. [provided by RefSeq, Sep 2017]

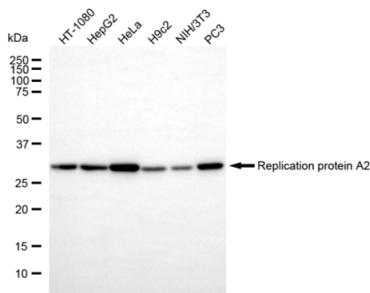
Research Area

Epigenetics and Nuclear Signaling

Image Data



Western blotting analysis using replication protein A2 antibody (KVA01834). Replication protein A2 expression in wild-type (WT) and replication protein A2 (RPA2) shRNA knockdown (KD) HepG2 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with replication protein A2 antibody (KVA01834, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using replication protein A2 antibody (KVA01834). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with replication protein A2 antibody (KVA01834, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.