

Product datasheet

Anti-RPA70 antibody [8C3-D12-H10] **ab176467**

★★★★★ [2 Abreviews](#) [4 References](#) [5 Images](#)

Overview

Product name	Anti-RPA70 antibody [8C3-D12-H10]
Description	Mouse monoclonal [8C3-D12-H10] to RPA70
Host species	Mouse
Tested applications	Suitable for: ICC/IF, IP, WB
Species reactivity	Reacts with: Mouse, Rat, Human, African green monkey
Immunogen	Recombinant fragment corresponding to Human RPA70. Purified recombinant human RPA70 protein fragments expressed in E.coli Database link: P27694
Positive control	COS7, HT1080, A431, MCF7, K562, HeLa, 293T, 3T3 and C6 cell lysate
General notes	<p>This product was changed from ascites to tissue culture supernatant on 17.08.2018. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.03% Proclin 300 Constituent: 50% Glycerol
Purity	Concentrated Culture Supernatant
Clonality	Monoclonal
Clone number	8C3-D12-H10

Isotype

IgG2a

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab176467 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★ (1)	Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
WB	★★★★★ (1)	1/1000. Predicted molecular weight: 68 kDa.

Target

Function

Plays an essential role in several cellular processes in DNA metabolism including replication, recombination and DNA repair. Binds and subsequently stabilizes single-stranded DNA intermediates and thus prevents complementary DNA from reannealing. Functions as component of the alternative replication protein A complex (aRPA). aRPA binds single-stranded DNA and probably plays a role in DNA repair; it does not support chromosomal DNA replication and cell cycle progression through S-phase. In vitro, aRPA cannot promote efficient priming by DNA polymerase alpha but supports DNA polymerase delta synthesis in the presence of PCNA and replication factor C (RFC), the dual incision/excision reaction of nucleotide excision repair and RAD51-dependent strand exchange.

Sequence similarities

Belongs to the replication factor A protein 1 family.

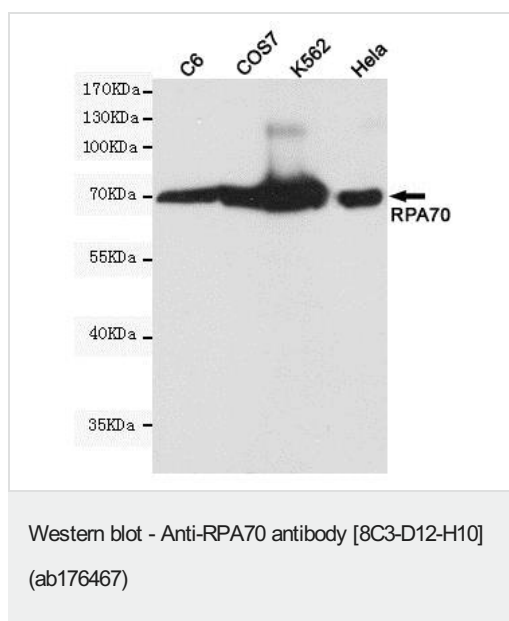
Post-translational modifications

Phosphorylated upon DNA damage, probably by ATM or ATR. Sumoylated on lysine residues Lys-449 and Lys-577, with Lys-449 being the major site. Sumoylation promotes recruitment of RAD51 to the DNA damage foci to initiate DNA repair through homologous recombination. Desumoylated by SENP6.

Cellular localization

Nucleus.

Images



All lanes : Anti-RPA70 antibody [8C3-D12-H10] (ab176467) at 1/1000 dilution

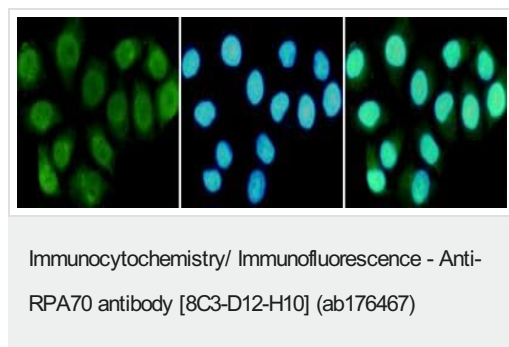
Lane 1 : C6 Cell lysate

Lane 2 : COS7 Cell lysate

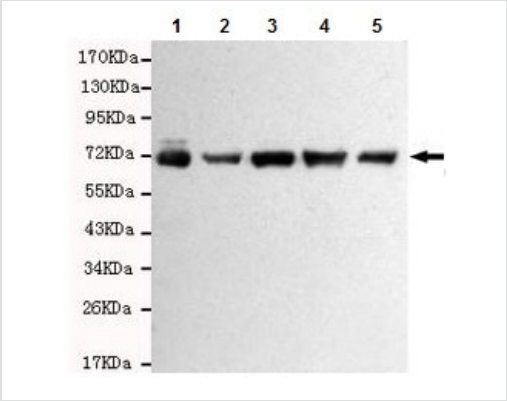
Lane 3 : K562 Cell lysate

Lane 4 : HeLa Cell lysate

Predicted band size: 68 kDa



Immunocytochemistry/Immunofluorescence analysis of HeLa cells fixed with paraformaldehyde, labeling RPA70 with ab176467 at 1/100. Left - RPA70, Middle - nuclear staining, Right - Merge. This image was produced with antibody produced in ascites.



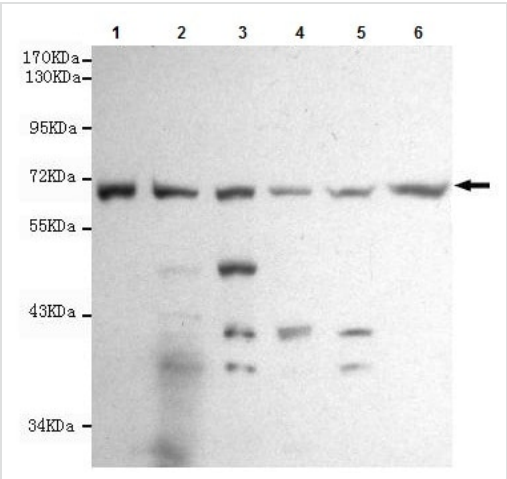
Western blot - Anti-RPA70 antibody [8C3-D12-H10] (ab176467)

All lanes : Anti-RPA70 antibody [8C3-D12-H10] (ab176467) at 1/1000 dilution

- Lane 1 :** 293T cell lysate
- Lane 2 :** 3T3 cell lysate
- Lane 3 :** K562 cell lysate
- Lane 4 :** HeLa cell lysate
- Lane 5 :** C6 cell lysate

Predicted band size: 68 kDa

This image was produced with antibody produced in ascites.



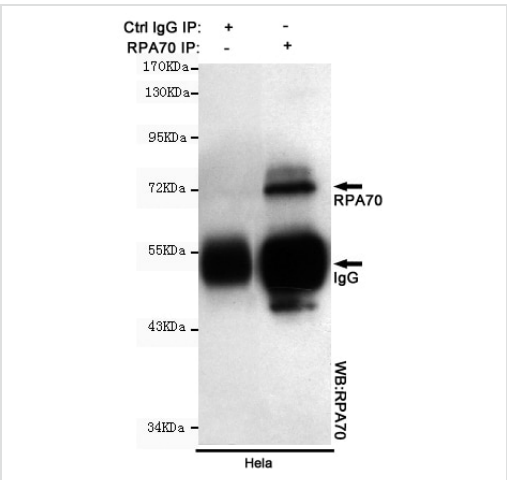
Western blot - Anti-RPA70 antibody [8C3-D12-H10] (ab176467)

All lanes : Anti-RPA70 antibody [8C3-D12-H10] (ab176467)

- Lane 1 :** COS7 cell lysate
- Lane 2 :** HT1080 cell lysate
- Lane 3 :** A431 cell lysate
- Lane 4 :** MCF7 cell lysate
- Lane 5 :** K562 cell lysate
- Lane 6 :** HeLa cell lysate

Predicted band size: 68 kDa

This image was produced with antibody produced in ascites.



Immunoprecipitation - Anti-RPA70 antibody [8C3-D12-H10] (ab176467)

Immunoprecipitation analysis of HeLa cell lysate labeling RPA70 with ab176467. This image was produced with antibody produced in ascites.

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