abcam

ab182143

Anti-RFC3 antibody [EPR14214]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR14214
Purification technique	Affinity purification Protein A
Concentration	1.309 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/250
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information Replication factor C subunit 3

Function	Subunit of the replication factor C (RFC) complex which acts during elongation of primed DNA templates by DNA polymerases delta and epsilon, and is necessary for ATP-dependent loading of proliferating cell nuclear antigen (PCNA) onto primed DNA.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Replication Factor C subunit 3 (RFC3) also known as RFC38 or RFC37 plays an important role in DNA replication and repair by forming part of the replication factor C complex. RFC3 is a protein with a molecular mass of approximately 38 kDa. It is ubiquitously expressed in various tissues where it contributes to maintaining genomic integrity.

Biological function summary	RFC3 facilitates the loading of the proliferating cell nuclear antigen (PCNA) onto DNA during the S phase of the cell cycle. As a component of the replication factor C (RFC) complex which is essential for DNA replication RFC3 works with other subunits to ensure the accurate duplication of the genome. It is important for the coordination and smooth progress of DNA synthesis which is vital for cell division and growth.
Pathways	RFC3 holds a significant role in the DNA replication and cell cycle pathways. By interacting with proteins like PCNA RFC3 helps initiate and regulate the proper progression through the cell cycle checkpoints. The RFC complex which includes RFC3 is involved in tethering DNA polymerases to template DNA facilitating continuous DNA synthesis. This important interaction ensures the fidelity and efficiency of the DNA replication process.
Associated diseases and disorders	Alterations in RFC3 expression or function can relate to cancer and genomic instability disorders. Elevated levels of RFC3 have been observed in various types of cancer where it often links with other overexpressed proteins like PCNA contributing to uncontrolled cell proliferation. Investigating RFC3's role and its interactions with related proteins helps in understanding tumorigenesis and developing potential therapeutic strategies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

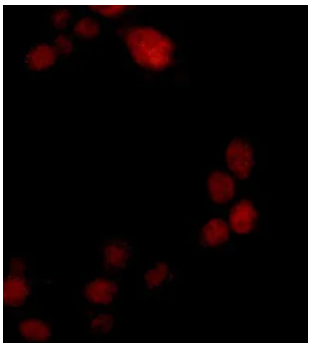
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

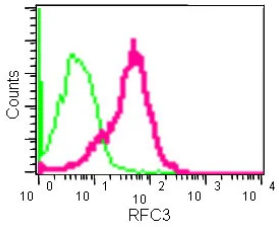
3 product images



Immunocytochemistry/ Immunofluorescence - Anti-RFC3 antibody [EPR14214] (ab182143)

RFC3 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-RFC3 antibody

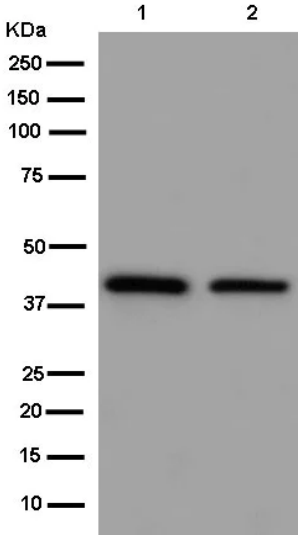
Immunofluorescent analysis of 4% paraformaldehyde fixed 293 cells labeling RFC3 using ab182143 at a 1/100 dilution. A Goat anti rabbit IgG (Alexa Fluor®555) was used as the secondary at a 1/200 dilution.



Flow Cytometry (Intracellular) - Anti-RFC3 antibody [EPR14214] (ab182143)

RFC3 Flow Cytometry (Intracellular) staining using rabbit Anti-RFC3 antibody

Intracellular Flow Cytometry analysis of HeLa cells labeling RFC3 using ab182143 at a 1/250 dilution (pink). Goat anti rabbit IgG (FITC) used as the secondary at a 1/150 dilution. Isotype control Rabbit monoclonal IgG (green). Cells were fixed in 2% paraformaldehyde



Western blot - Anti-RFC3 antibody [EPR14214] (ab182143)

RFC3 Western blot staining using rabbit Anti-RFC3 antibody

All lanes:
Western blot - Anti-RFC3 antibody [EPR14214] (ab182143) at 1/10000 dilution

Lane 1:
Jurkat cell lysate at 20 µg

Lane 2:
293 cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 41 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.