abcam

ab248872

Anti-CCDC98 antibody [EPR6310(2)] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR6310(2)
Purification technique	Affinity purification
Concentration	1.06 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-

Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information ABRAXAS1

Function	Involved in DNA damage response and double-strand break (DSB) repair. Component of the BRCA1-A complex, acting as a central scaffold protein that assembles the various components of the complex and mediates the recruitment of BRCA1. The BRCA1-A complex specifically recognizes 'Lys-63'-linked ubiquitinated histones H2A and H2AX at DNA lesion sites, leading to target the BRCA1-BARD1 heterodimer to sites of DNA damage at DSBs. This complex also possesses deubiquitinase activity that specifically removes 'Lys-63'-linked ubiquitin on histones H2A and H2AX.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab248872 is the carrier-free version of ab139191.

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

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

Activity summary	CCDC98 also known as NABP2 or MERIT40 functions as a protein that assists in the DNA damage response and repair pathways. Its molecular mass is approximately 42 kDa. CCDC98 primarily shows expression in the nucleus of cells. It is essential in repair processes by interacting with other proteins involved in the DNA double-strand break repair mechanism. The protein ensures stability within the BRCA1-A complex playing a role in maintaining genomic integrity.
Biological function summary	CCDC98 supports cellular processes by stabilizing the BRCA1-A complex which is important for the homologous recombination repair of damaged DNA. This protein forms an important part of the machinery that recognizes and processes DNA damage. It interacts with other core components of the DNA repair system like BRCA1 RAP80 and ABRAXAS ensuring efficient repair and prevention of genomic instability.
Pathways	CCDC98 is integral to the homologous recombination repair and cell cycle checkpoint pathways. Through its association with the BRCA1-A complex CCDC98 influences the recruitment and retention of repair proteins at DNA damage sites a critical event in the DNA damage response pathway. It connects with other proteins such as BRCA1 and RAP80 to regulate repair pathway activities and proper cell cycle progression reinforcing cellular responses to DNA damage.
Associated diseases and disorders	CCDC98 is linked to breast and ovarian cancers. Mutations or dysregulation affecting CCDC98's function can disrupt BRCA1-A complex stability leading to compromised DNA repair ability which is a factor in tumorigenesis. It connects to the BRCA1 protein in these disease contexts where impaired interactions can raise the risk of developing cancer showcasing the significance of this protein in health and disease contexts.

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.

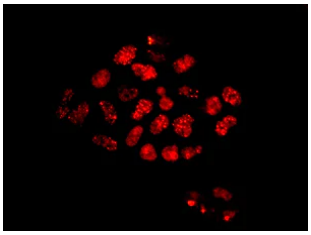
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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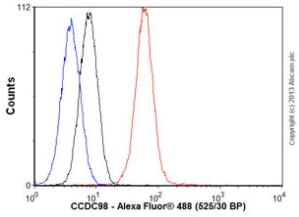
4 product images



Immunocytochemistry/ Immunofluorescence - Anti-CCDC98 antibody [EPR6310(2)] - BSA and Azide free (ab248872)

CCDC98 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CCDC98 antibody

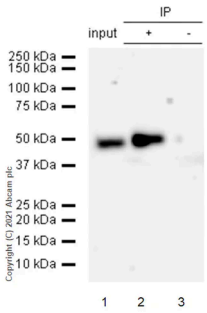
This data was developed using ab139191, the same antibody clone in a different buffer formulation.Immunofluorescent analysis of HeLa cells labelling CCDC98 with ab139191 at 1/100 dilution.



Flow Cytometry (Intracellular) - Anti-CCDC98 antibody [EPR6310(2)] - BSA and Azide free (ab248872)

CCDC98 Flow Cytometry (Intracellular) staining using rabbit Anti-CCDC98 antibody

This data was developed using ab139191, the same antibody clone in a different buffer formulation.
Overlay histogram showing HeLa cells stained with ab139191 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab139191, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Immunoprecipitation - Anti-CCDC98 antibody [EPR6310(2)] - BSA and Azide free (ab248872)

This data was developed using ab139191, the same antibody clone in a different buffer formulation.
CCDC98 was immunoprecipitated from 0.35 mg HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10 µg with ab139191 at 1/60 dilution (2µg). VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10 µg

Lane 2: ab139191 IP in HeLa whole cell lysate

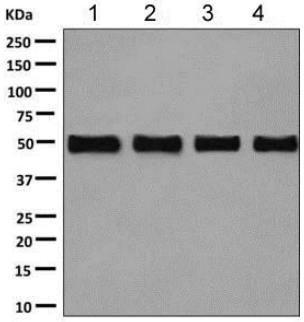
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab139191 in HeLa whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

All lanes:
Immunoprecipitation - Anti-CCDC98 antibody [EPR6310(2)] (ab139191)

Predicted band size: 47 kDa

Observed band size: 47 kDa



Western blot - Anti-CCDC98 antibody [EPR6310(2)] - BSA and Azide free (ab248872)

CCDC98 Western blot staining using rabbit Anti-CCDC98 antibody

This data was developed using ab139191, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-CCDC98 antibody [EPR6310(2)] (ab139191) at 1/1000 dilution

Lane 1:
HeLa cell lysate at 10 µg

Lane 2:
MCF7 cell lysate at 10 µg

Lane 3:
293T (Human embryonic kidney epithelial cell) cell lysate at 10 µg

Lane 4:
Jurkat cell lysate at 10 µg

Secondary

All lanes:
Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 47 kDa

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