

CCDC98 Antibody
Catalog # ASC10578**Specification**

CCDC98 Antibody - Product Information

Application	WB, IHC-P, E
Primary Accession	Q6UWZ7
Other Accession	NP_620775 , 109148531
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	CCDC98 antibody can be used for detection of CCDC98 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL.

CCDC98 Antibody - Additional Information

Gene ID	84142
Target/Specificity	
FAM175A;	

Reconstitution & Storage

CCDC98 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

CCDC98 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CCDC98 Antibody - Protein Information

Name ABRAXAS1 ([HGNC:25829](#))

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.

Cellular Location

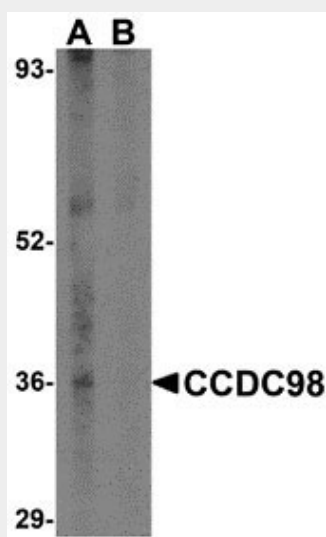
Nucleus Note=Localizes at sites of DNA damage at double-strand breaks (DSBs)

CCDC98 Antibody - Protocols

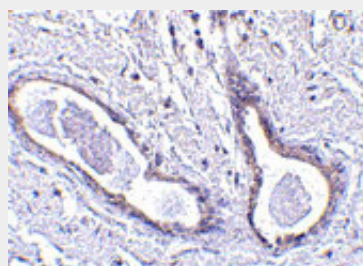
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CCDC98 Antibody - Images



Western blot analysis of CCDC98 in human breast tissue lysate in (A) the absence and (B) presence of blocking peptide with CCDC98 antibody at 1 μ g/mL.



Immunohistochemistry of CCDC98 in human breast tissue with CCDC98 antibody at 5 μ g/mL.

CCDC98 Antibody - Background

CCDC98 Antibody: CCDC98, also known as Abraxas 1, was identified through protein binding studies using the breast and ovarian predisposition protein BRCA1 as the binding target. CCDC98 recruits RAP80, a ubiquitin-binding protein, to BRCA1, allowing the formation of BRCA1 foci in response to DNA damage caused by ionizing radiation. Both CCDC98 and RAP80 are required for DNA damage resistance, G2-M checkpoint control, and DNA repair. Cells depleted of either CCDC98 or RAP80 exhibited increased sensitivity to ionizing radiation, although not as much as in BRCA1-depleted cells, suggesting that CCDC98 and RAP80 control only part of the DNA damage

response role of BRCA1. At least two isoforms of CCDC98 are known to exist.

CCDC98 Antibody - References

Wang B, Matsuoka S, Balliff BA, et al. Abraxas and RAP80 form a BRCA1 protein complex required for the DNA damage response. *Science* 2007; 316:1194-1198.

Kim H, Huang J, and Chen J. CCDC98 is a BRCA1-BRCT domain-binding protein involved in the DNA damage response. *Nat. Struct. Mol. Biol.* 2007; 14:710-5.

Liu Z, Wu J, and Yu X. CCDC98 targets BRCA1 to DNA damage sites. *Nat. Struct. Mol. Biol.* 2007; 14:716-20.