10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.622.0609

# Rad51C Polyclonal Antibody
**Catalog # AP72150**

## Specification

### Rad51C Polyclonal Antibody - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | O43502 |
| Reactivity | **Human, Monkey** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |

### Rad51C Polyclonal Antibody - Additional Information

**Gene ID** 5889

**Other Names**
RAD51C; RAD51L2; DNA repair protein RAD51 homolog 3; R51H3; RAD51 homolog C; RAD51-like protein 2

**Dilution**
WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.

**Format**
Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

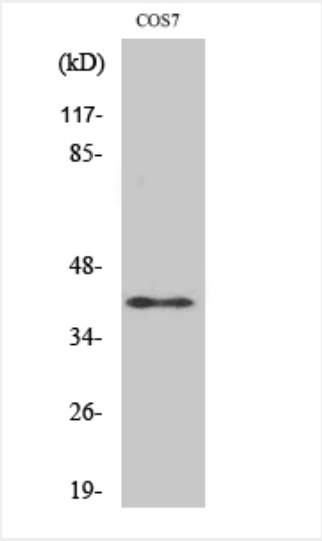
**Storage Conditions**
-20℃

### Rad51C Polyclonal Antibody - Protein Information

**Name** RAD51C

**Synonyms** RAD51L2

**Function**
Essential for the homologous recombination (HR) pathway of DNA repair. Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA breaks arising during DNA replication or induced by DNA-damaging agents. Part of the RAD21 paralog protein complexes BCDX2 and CX3




### Rad51C Polyclonal Antibody - Background

Essential for the homologous recombination (HR) pathway of DNA repair. Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA breaks arising during DNA replication or induced by DNA-damaging agents. Part of the RAD21 paralog protein complexes BCDX2 and CX3 which act at different stages of the BRCA1-BRCA2-dependent HR pathway. Upon DNA damage, BCDX2 seems to act downstream of BRCA2 recruitment and upstream of RAD51 recruitment; CX3 seems to act downstream of RAD51 recruitment; both complexes bind predominantly to the intersection of the four duplex arms of the Holliday junction (HJ) and to junction of replication forks. The BCDX2 complex was originally reported to bind single-stranded DNA, single-stranded gaps in duplex DNA and specifically to nicks in duplex DNA. The BCDX2 subcomplex RAD51B:RAD51C exhibits single-stranded DNA-dependent ATPase activity suggesting an involvement in early stages of the HR pathway. Involved in RAD51 foci formation in response to DNA damage

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### Cellular Location
Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Mitochondrion. Note=DNA damage induces an increase in nuclear levels. Accumulates in DNA damage induced nuclear foci or RAD51C foci which is formed during the S or G2 phase of cell cycle. Accumulation at DNA lesions requires the presence of NBN/NBS1, ATM and RPA

### Tissue Location
Expressed in a variety of tissues, with highest expression in testis, heart muscle, spleen and prostate

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**Rad51C Polyclonal 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 Cytomety
- Cell Culture