

### **Rad51D Polyclonal Antibody**

**Catalog # AP72151** 

#### **Specification**

## **Rad51D Polyclonal Antibody - Product Information**

Application WB, IHC-P
Primary Accession O75771
Reactivity Human
Host Rabbit
Clonality Polyclonal

### Rad51D Polyclonal Antibody - Additional Information

**Gene ID 5892** 

#### **Other Names**

RAD51D; RAD51L3; DNA repair protein RAD51 homolog 4; R51H3; RAD51 homolog D; RAD51-like protein 3; TRAD

#### **Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~ $\sim$ N/A

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

# **Storage Conditions**

-20°C

## Rad51D Polyclonal Antibody - Protein Information

Name RAD51D

Synonyms RAD51L3

### **Function**

Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA breaks arising during DNA replication or induced by DNA-damaging agents. Bind to single-stranded DNA (ssDNA) and has DNA-dependent ATPase activity. Part of the RAD51 paralog protein complex BCDX2 which acts in the BRCA1-BRCA2-dependent HR pathway. Upon DNA damage, BCDX2 acts downstream of BRCA2 recruitment and upstream of RAD51 recruitment. BCDX2 binds predominantly to the intersection of the four duplex arms of the Holliday junction 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. Involved in telomere maintenance. The BCDX2 subcomplex XRCC2:RAD51D can stimulate Holliday junction resolution by BLM.



#### **Cellular Location**

Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome, telomere

#### **Tissue Location**

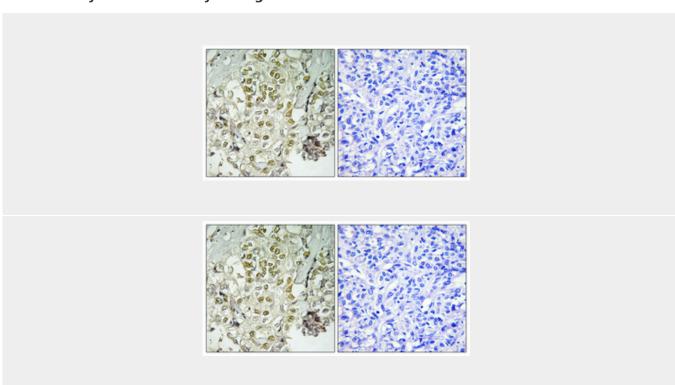
Expressed in colon, prostate, spleen, testis, ovary, thymus and small intestine. Weakly expressed in leukocytes

### Rad51D Polyclonal Antibody - Protocols

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

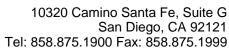
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Rad51D Polyclonal Antibody - Images



# Rad51D Polyclonal Antibody - Background

Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA breaks arising during DNA replication or induced by DNA-damaging agents. Bind to single- stranded DNA (ssDNA) and has DNA-dependent ATPase activity. Part of the Rad21 paralog protein complex BCDX2 which acts in the BRCA1-BRCA2-dependent HR pathway. Upon DNA damage, BCDX2 acts downstream of BRCA2 recruitment and upstream of RAD51 recruitment. BCDX2 binds predominantly to the intersection of the four duplex arms of the Holliday junction 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. Involved in telomere





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