

### **Anti-RAD51D Antibody**

Rabbit polyclonal antibody to RAD51D Catalog # AP60623

## **Specification**

## **Anti-RAD51D Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
WB, IHC
075771
Human, Mouse
Rabbit
Polyclonal
35049

## **Anti-RAD51D Antibody - Additional Information**

**Gene ID 5892** 

#### **Other Names**

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

### Target/Specificity

Recognizes endogenous levels of RAD51D protein.

### **Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200) IHC~~1:100~500

### **Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

### **Anti-RAD51D 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**

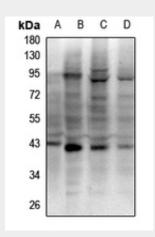
Expressed in colon, prostate, spleen, testis, ovary, thymus and small intestine. Weakly expressed in leukocytes

## **Anti-RAD51D Antibody - Protocols**

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

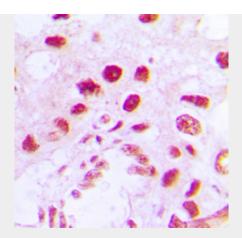
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **Anti-RAD51D Antibody - Images**



Western blot analysis of RAD51D expression in mouse testis (A), CT26 (B), Jurkat (C), PC3 (D) whole cell lysates.





Immunohistochemical analysis of RAD51D staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

# Anti-RAD51D Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RAD51D. The exact sequence is proprietary.