

### Anti-RAD51AP1 Antibody (aa340-352)

Goat Anti Human Polyclonal Antibody Catalog # ALS17909

## **Specification**

## Anti-RAD51AP1 Antibody (aa340-352) - Product Information

Application IHC-P, E
Primary Accession O96B01
Predicted Human
Host Goat
Clonality Polyclonal
Calculated MW 38457

## Anti-RAD51AP1 Antibody (aa340-352) - Additional Information

**Gene ID** 10635

Alias Symbol RAD51AP1

**Other Names** 

RAD51AP1, PIR51, RAD51-associated protein 1, RAD51 associated protein 1, RAD51-interacting protein

# Target/Specificity

Human RAD51AP1. This antibody is expected to recognise both reported isoforms.

# **Reconstitution & Storage**

Immunoaffinity purified

### **Precautions**

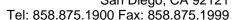
Anti-RAD51AP1 Antibody (aa340-352) is for research use only and not for use in diagnostic or therapeutic procedures.

### Anti-RAD51AP1 Antibody (aa340-352) - Protein Information

Name RAD51AP1 {ECO:0000303|PubMed:16990250, ECO:0000312|HGNC:HGNC:16956}

## **Function**

Structure-specific DNA-binding protein involved in DNA repair by promoting RAD51-mediated homologous recombination (PubMed:<a href="http://www.uniprot.org/citations/17996710" target="\_blank">17996710</a>, PubMed:<a href="http://www.uniprot.org/citations/17996711" target="\_blank">17996711</a>, PubMed:<a href="http://www.uniprot.org/citations/20871616" target="\_blank">20871616</a>, PubMed:<a href="http://www.uniprot.org/citations/25288561" target="\_blank">25288561</a>, PubMed:<a href="http://www.uniprot.org/citations/26323318" target="\_blank">26323318</a>, Acts by stimulating D-Loop formation by RAD51: specifically enhances joint molecule formation through its structure-specific DNA interaction and its interaction with RAD51 (PubMed:<a href="http://www.uniprot.org/citations/17996710" target="\_blank">17996710</a>, PubMed:<a href="http://www.uniprot.org/citations/17996711" target="\_blank">17996711</a>, Binds single-stranded DNA (ssDNA), double-stranded DNA





(dsDNA) and secondary DNA structures, such as D-loop structures: has a strong preference for branched-DNA structures that are obligatory intermediates during joint molecule formation (PubMed:<a href="http://www.uniprot.org/citations/9396801" target=" blank">9396801</a>, PubMed:<a href="http://www.uniprot.org/citations/17996711" target="\_blank">17996711</a>, PubMed:<a href="http://www.uniprot.org/citations/22375013" target="blank">22375013</a>, PubMed:<a href="http://www.uniprot.org/citations/17996710" target="blank">17996710</a>). Cooperates with WDR48/UAF1 to stimulate RAD51-mediated homologous recombination: both WDR48/UAF1 and RAD51AP1 have coordinated role in DNA-binding during homologous recombination and DNA repair (PubMed: <a href="http://www.uniprot.org/citations/27463890" target=" blank">27463890</a>, PubMed:<a href="http://www.uniprot.org/citations/27239033" target="\_blank">27239033</a>, PubMed:<a href="http://www.uniprot.org/citations/32350107" target="blank">32350107</a>). WDR48/UAF1 and RAD51AP1 also have a coordinated role in DNA-binding to promote USP1-mediated deubiquitination of FANCD2 (PubMed: <a href="http://www.uniprot.org/citations/31253762" target=" blank">31253762</a>). Also involved in meiosis by promoting DMC1-mediated homologous meiotic recombination (PubMed: <a href="http://www.uniprot.org/citations/21307306" target=" blank">21307306</a>). Key mediator of alternative lengthening of telomeres (ALT) pathway, a homology-directed repair mechanism of telomere elongation that controls proliferation in aggressive cancers, by stimulating homologous recombination (PubMed:<a href="http://www.uniprot.org/citations/31400850" target=" blank">31400850</a>). May also bind RNA; additional evidences are however required to confirm RNA-binding in vivo (PubMed: <a href="http://www.uniprot.org/citations/9396801" target=" blank">9396801</a>).

### **Cellular Location**

Chromosome. Nucleus Chromosome, telomere. Note=Colocalizes with RAD51 to multiple nuclear foci (By similarity). Colocalizes with DMC1 on meiotic chromatin (By similarity) {ECO:0000250|UniProtKB:Q8C551}

#### **Tissue Location**

Highly expressed in testis and thymus (PubMed:9396801). Lower levels in colon and small intestine (PubMed:9396801). Little or no expression in spleen, prostate, ovary and peripheral blood leukocytes (PubMed:9396801)

# Anti-RAD51AP1 Antibody (aa340-352) - 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

Anti-RAD51AP1 Antibody (aa340-352) - Images