

**RAD51AP1 antibody - middle region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI11778****Specification**

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**RAD51AP1 antibody - middle region - Product Information**

Application	WB
Primary Accession	<a href="#">O96B01</a>
Other Accession	<a href="#">NM_006479</a> , <a href="#">NP_006470</a>
Reactivity	Human, Rat, Rabbit, Pig, Horse, Yeast, Dog
Predicted	Human, Rabbit, Pig, Horse, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37kDa KDa

**RAD51AP1 antibody - middle region - Additional Information****Gene ID** 10635

Alias Symbol	<b>PIR51</b>
<b>Other Names</b>	
RAD51-associated protein 1, RAD51-interacting protein, R51A1	

**Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**

Add 50 ul of distilled water. Final anti-RAD51AP1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

**Precautions**

RAD51AP1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

**RAD51AP1 antibody - middle region - 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>).

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)

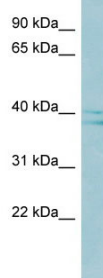
### **RAD51AP1 antibody - middle region - Protocols**

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](#)

### **RAD51AP1 antibody - middle region - Images**





WB Suggested Anti-RAD51AP1 Antibody Titration: 0.2-1  $\mu$ g/ml

ELISA Titer: 1:62500

Positive Control: HT1080 cell lysate

#### **RAD51AP1 antibody - middle region - References**

Obama,K., (2008) Clin. Cancer Res. 14 (5), 1333-1339 Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.