

PIR51 / RAD51AP1 Antibody (C-Term)
Peptide-affinity purified goat antibody
Catalog # AF2288a**Specification**

PIR51 / RAD51AP1 Antibody (C-Term) - Product Information

Application	IHC
Primary Accession	Q96B01
Other Accession	NP_001124334.1 , NP_006470 , 10635
Reactivity	Human
Predicted	Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	38457

PIR51 / RAD51AP1 Antibody (C-Term) - Additional Information**Gene ID** 10635**Other Names**

RAD51-associated protein 1, RAD51-interacting protein, R51A1

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PIR51 / RAD51AP1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

PIR51 / RAD51AP1 Antibody (C-Term) - 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:17996710, PubMed:17996711, PubMed:20871616, PubMed:25288561, PubMed:26323318). 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:17996710, PubMed:17996711). 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:9396801, PubMed:17996711, PubMed:22375013, PubMed:17996710). 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:27463890, PubMed:27239033, PubMed:32350107). WDR48/UAF1 and RAD51AP1 also have a coordinated role in DNA-binding to promote USP1-mediated deubiquitination of FANCD2 (PubMed:31253762). Also involved in meiosis by promoting DMC1-mediated homologous meiotic recombination (PubMed:21307306). 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:31400850). May also bind RNA; additional evidences are however required to confirm RNA-binding in vivo (PubMed:9396801).

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)

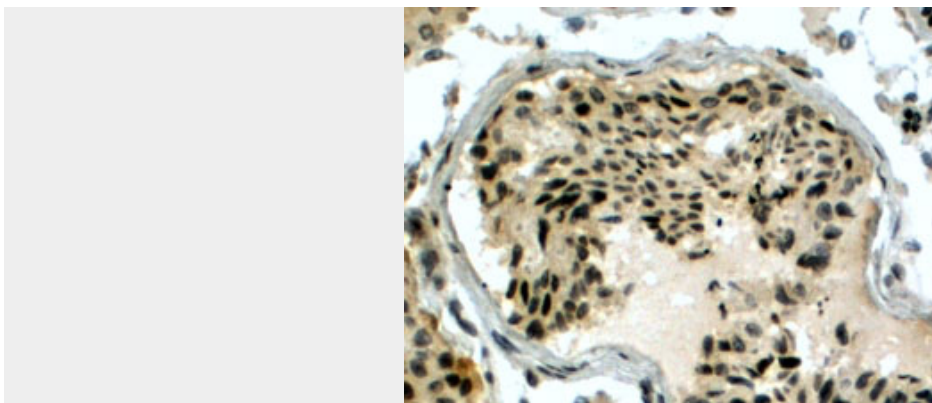
PIR51 / RAD51AP1 Antibody (C-Term) - Protocols

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](#)

PIR51 / RAD51AP1 Antibody (C-Term) - Images





AF2288a (4 µg/ml) staining of paraffin embedded Human Testis. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

PIR51 / RAD51AP1 Antibody (C-Term) - Background

This antibody is expected to recognise both reported isoforms.

PIR51 / RAD51AP1 Antibody (C-Term) - References

A novel nucleic acid-binding protein that interacts with human rad51 recombinase. Kovalenko OV, Golub EI, Bray-Ward P, Ward DC, Radding CM. Nucleic Acids Res. 1997 Dec 15;25(24):4946-53. PMID: 9396801