10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RAD51AP1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57640

Specification

RAD51AP1 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q96B01
Reactivity	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**38457**

RAD51AP1 Polyclonal Antibody - Additional Information

Gene ID 10635

Other Names
RAD51-associated protein 1, HsRAD51AP1, RAD51-interacting protein, RAD51AP1 {ECO:0000303|PubMed:16990250, ECO:0000312|HGNC:HGNC:16956}

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

RAD51AP1 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/17996710"

target="_blank">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:17996710, PubMed:17996711, PubMed:22375013, PubMed:9396801). 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:27239033, PubMed:27463890, 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)

RAD51AP1 Polyclonal Antibody - 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

RAD51AP1 Polyclonal Antibody - Images