

**DATASHEET**

**RAD54A Rabbit Polyclonal Antibody**

CAT. NO. APA12035

**KEY FEATURES**

Target	RAD54A	Source / Host	Rabbit
Reactivity	Human	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

**BACKGROUND**

Multifunctional ATPase that plays a role in homologous recombination (HR) which is a major pathway for repairing DNA double-strand breaks (DSBs), single-stranded DNA (ssDNA) gaps, and stalled or collapsed replication forks which is a major pathway for repairing DNA double-strand breaks (DSBs), single-stranded DNA (ssDNA) gaps, and stalled or collapsed replication forks. Acts as a molecular motor during the homology search and guides RAD51 ssDNA along a donor dsDNA thereby changing the homology search from the diffusion-based mechanism to a motor-guided mechanism. Also plays an essential role in RAD51-mediated synaptic complex formation which consists of three strands encased in a protein filament formed once homology is recognized.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200
IF/ICC	1:100 - 1:500

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to RAD54A
Specificity	Recognizes endogenous levels of RAD54A protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RAD54A. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 84 kD; Observed: 84 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	RAD54A; DNA repair and recombination protein RAD54-like; RAD54 homolog; hHR54; hRAD54
Gene Symbol	RAD54L
Entrez Gene	8438(Human)
SwissProt	Q92698(Human)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

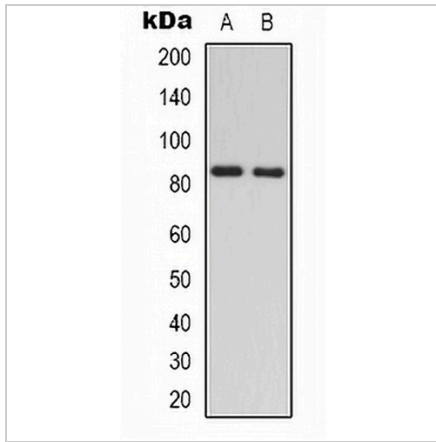
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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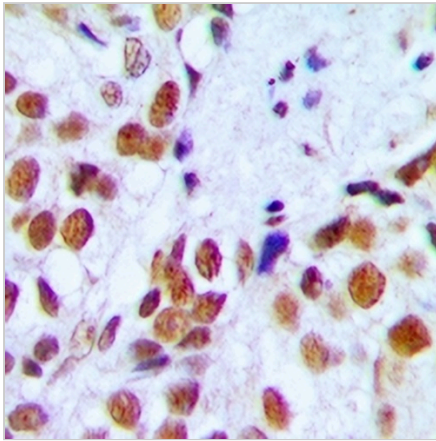
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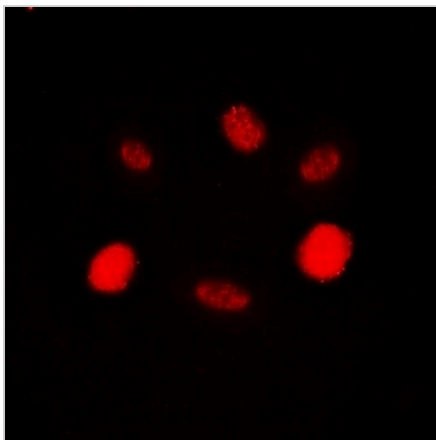
**DATA**



Western blot analysis of RAD54A expression in Jurkat (A), HEK293T (B) whole cell lysates. (Predicted band size: 84 kD; Observed band size: 84 kD)



Immunohistochemical analysis of RAD54A staining in human breast 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.



Immunofluorescent analysis of RAD54A staining in HEK293T cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.