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RAD54 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11971b

Product Information

Application	WB, FC, E
Primary Accession	Q92698
Other Accession	P70270, O12944, NP_003570
Reactivity	Human
Predicted	Mouse, Rat, Rabbit, Chicken, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20635
Calculated MW	84352
Antigen Region	634-663

Additional Information

Gene ID	8438
Other Names	DNA repair and recombination protein RAD54-like, 364-, RAD54 homolog, hHR54, hRAD54, RAD54L, RAD54A
Target/Specificity	This RAD54 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 634-663 amino acids from the C-terminal region of human RAD54.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	RAD54 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RAD54L (HGNC:9826)
Synonyms	RAD54A

Function	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 (PubMed:11459989, PubMed:12205100, PubMed:24798879, PubMed:27264870, PubMed:32457312, PubMed:9774452). 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. Once DNA strand exchange occured, dissociates RAD51 from nucleoprotein filaments formed on dsDNA (By similarity).
Cellular Location	Nucleus.

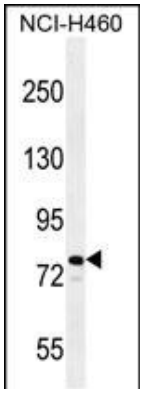
Background

The protein encoded by this gene belongs to the DEAD-like helicase superfamily, and shares similarity with Saccharomyces cerevisiae Rad54, a protein known to be involved in the homologous recombination and repair of DNA. This protein has been shown to play a role in homologous recombination related repair of DNA double-strand breaks. The binding of this protein to double-strand DNA induces a DNA topological change, which is thought to facilitate homologous DNA paring, and stimulate DNA recombination. Alternative splicing results in multiple transcript variants encoding the same protein.

References

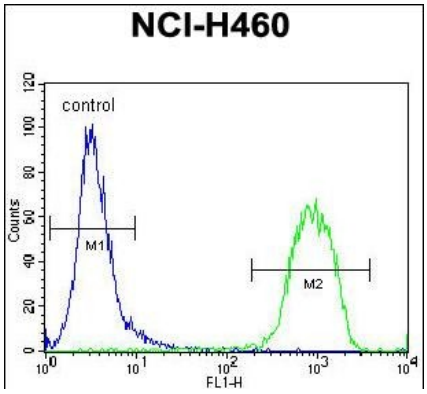
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Images



RAD54 Antibody (C-term) (Cat. #AP11971b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the RAD54 antibody detected the RAD54 protein (arrow).

RAD54 Antibody (C-term) (Cat. #AP11971b) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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