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

RAD54B Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21946a

Product Information

Application	WB, E
Primary Accession	Q9Y620
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB54407
Calculated MW	102967

Additional Information

Gene ID	25788
Other Names	DNA repair and recombination protein RAD54B, 3.6.4.-, RAD54 homolog B, RAD54B
Target/Specificity	This RAD54B antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 111-142 amino acids from human RAD54B.
Dilution	WB~~1:2000 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	RAD54B Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RAD54B (HGNC:17228)
Function	Multifunctional ATPase that could play with RAD54, a redundant role in homologous recombination (HR), a major pathway for repairing DNA double-strand breaks (DSBs), single-stranded DNA (ssDNA) gaps, and stalled or collapsed replication forks (PubMed:11884632, PubMed:16428451). Could act as a molecular motor during the homology search and guide RAD51

	ssDNA along a donor dsDNA thereby changing the homology search from the diffusion-based mechanism to a motor-guided mechanism (PubMed:11782437, PubMed:11884632, PubMed:16428451). Once DNA strand exchange occured, could dissociate RAD51 from nucleoprotein filaments formed on dsDNA (By similarity). May also function as a molecular adapter, promoting MDM2-MDM4 heterodimerization to facilitate the ubiquitin-dependent degradation of p53, thereby modulating the cellular decision between cell cycle arrest and progression in response to DNA damage (PubMed:25384516).
Cellular Location	Nucleus, nucleoplasm. Note=Active at DNA double-strand breaks.
Tissue Location	Abundantly expressed in testis and spleen. Relatively low levels observed in thymus, prostate, ovary and colon

Background

Involved in DNA repair and mitotic recombination. May play an active role in recombination processes in concert with other members of the RAD52 epistasis group.

References

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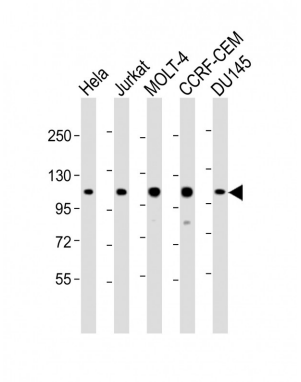
Li W.B.,et al.Submitted (JAN-2003) to the EMBL/GenBank/DDBJ databases.
Nusbaum C.,et al.Nature 439:331-335(2006).
Tanaka K.,et al.J. Biol. Chem. 275:26316-26321(2000).
Miyagawa K.,et al.EMBO J. 21:175-180(2002).

Images



All lanes : Anti-RAD54B Antibody (N-Term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: MOLT-4 whole cell lysate Lane 4: CCRF-CEM whole cell lysate Lane 5: DU145 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 103 kDa Blocking/Dilution buffer: 5% NFDM/TBST.