OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AP09254PU-N

RAD54 (RAD54L) (1-17) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	Suitable for use in ELISA and by Western blot. Expect a band approximately 84 kDa in size corresponding to RAD54 protein by Western blotting in the appropriate cell lysate or extract. Splice variants exist for this protein that may result in the detection of lower molecular weight bands. Recommended Dilutions: ELISA: 1/10000-1/40000. Western Blot: 1/500-1/2000.
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding aa 1-17 of Human RAD54 protein.
Specificity:	BLAST analysis indicates 100% homology of the immunizing sequence with RAD54 from Human. Cross reactivity with RAD54 protein homologues from other sources may not occur as sequence homology varies by at least one amino acid residue in this sequence.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 containing 0.01% (w/v) Sodium Azide as preservative. State: Aff - Purified State: Liquid (sterile filtered) purified Ig fraction.
Concentration:	lot specific
Purification:	Immunoaffinity Chromatography using peptide coupled to agarose beads.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	RAD54-like (S. cerevisiae)

View online »

Database Link: Entrez Gene 8438 Human
Q92698

Background: RAD54, also known as hHR54, HR54, hRAD54 and RAD54A, 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 pairing, and stimulate DNA recombination.

Synonyms: RAD54A, RAD54 homolog, hRAD54, hHR54

Product images:

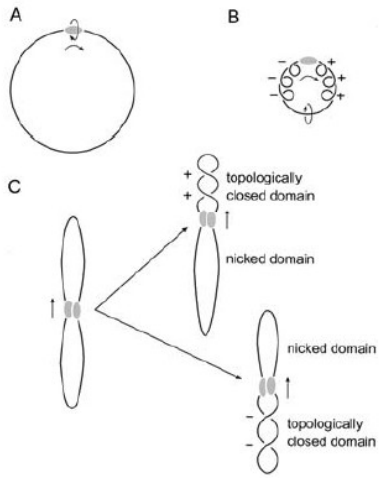

Figure 1. Model for generation of supercoiling by hRad54 translocation along DNA. The hRad54 complex and plasmid DNA are indicated by the shaded oval and black line, respectively. (A) Movement of the hRad54 complex by tracking along the helical path of DNA is indicated by the arrows. When the complex is free to rotate around the DNA, no change in supercoiling will be induced in the plasmid DNA. (B) When the hRad54 complex tracks along the helix, while being prevented from rotating around the DNA, positive supercoils will arise ahead of the protein complex and negative supercoils behind it. These supercoils can freely distribute along the plasmid and therefore they will cancel each other out. (C) The interaction of two hRad54 complexes on a plasmid will divide the plasmid into two domains. Because the plasmid is singly nicked, one domain will contain a nick, whereas the other contains two covalently closed DNA strands. Depending on the position of the nick relative to the movement of the protein complex along the DNA, topoisomers containing either negative or positive supercoils will result after ligation of the nick.