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Datasheet for 600-401-684

RAD54 Antibody

Overview

Description:	Anti-Human RAD 54 (RABBIT) Antibody - 600-401-684
Item No.:	600-401-684
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

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:	rabbit anti-RAD54 antibody, RAD-54, RAD 54, RAD54A, RAD-54A, RAD 54A, RAD54L, RAD-54L, RAD 54L, DNA repair and recombination protein RAD54-like antibody, hHR 54 antibody, hHR54 antibody, hRAD 54 antibody, hRAD54 antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	RAD54L
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a N-Terminal region near aa 1-25 of Human RAD54 protein.

Purity/Specificity:	This product is an affinity-purified antibody produced by immunoaffinity chromatography using peptide coupled to agarose beads. 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.
Relevant Links:	• UniProtKB - Q92698 • GeneID - 603761 • NCBI - 216548186 • GeneID - 8438

Application Details

Tested Applications:	ELISA, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. 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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
WB:	User Optimized

Formulation

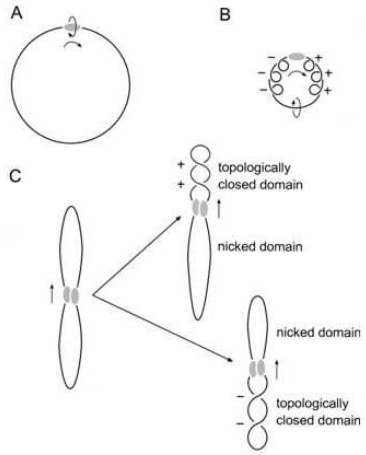
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Pathway
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.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.