



Rabbit Anti-Human RAD51 Polyclonal Antibody (CABT-L2271)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Polyclonal Antibody to RAD51 Homolog (Knockout Validated)
Specificity	The antibody is a rabbit polyclonal antibody raised against RAD51. It has been selected for its ability to recognize RAD51 in immunohistochemical staining and western blotting.
Target	RAD51
Immunogen	Recombinant fragment corresponding to human RAD51 (Ala2~Asp339)
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Antigen-specific affinity chromatography followed by Protein A affinity chromatography
Conjugate	Unconjugated
Applications	WB
Format	Liquid
Concentration	Lot specific
Size	200 µg
Buffer	Supplied as solution form in 0.01M PBS with 50% glycerol, pH7.4.
Preservative	0.05% Proclin-300

Storage	Avoid repeated freeze/thaw cycles. Store at 4°C for frequent use. Aliquot and store at -20°C for 12 months.
Ship	4°C with ice bags

BACKGROUND

Introduction	The protein encoded by this gene is a member of the RAD51 protein family. RAD51 family members are highly similar to bacterial RecA and <i>Saccharomyces cerevisiae</i> Rad51, and are known to be involved in the homologous recombination and repair of DNA. This protein can interact with the ssDNA-binding protein RPA and RAD52, and it is thought to play roles in homologous pairing and strand transfer of DNA. This protein is also found to interact with BRCA1 and BRCA2, which may be important for the cellular response to DNA damage. BRCA2 is shown to regulate both the intracellular localization and DNA-binding ability of this protein. Loss of these controls following BRCA2 inactivation may be a key event leading to genomic instability and tumorigenesis. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2009]
Keywords	RAD51A;RECA;HsRad51;BRCC5;BRCA1/BRCA2-Containing Complex Subunit 5;DNA repair protein RAD51 homolog 1

GENE INFORMATION

Gene Name	RAD51 RAD51 recombinase [Homo sapiens (human)]
Official Symbol	RAD51
Synonyms	RAD51; RAD51 recombinase; RECA; BRCC5; MRMV2; HRAD51; RAD51A; HsRad51; HsT16930; DNA repair protein RAD51 homolog 1; RAD51 homolog A; RecA-like protein; recombination protein A; RecA, E. coli, homolog of; BRCA1/BRCA2-containing complex, subunit 5;
Entrez Gene ID	5888
Protein Refseq	NP_001157741
UniProt ID	Q06609
Chromosome Location	15q15.1
Pathway	Assembly of the RAD51-ssDNA nucleoprotein complex; BARD1 signaling events; Cell Cycle; DNA Repair; DNA damage response; Double-Strand Break Repair; Fanconi anemia pathway; Homologous DNA pairing and strand exchange;

Function

ATP binding; DNA polymerase binding; damaged DNA binding; double-stranded DNA binding; identical protein binding; protein C-terminus binding; protein binding; single-stranded DNA binding; single-stranded DNA-dependent ATPase activity;
