



# Anti-RAD51 polyclonal antibody (DPAB-DC2654)

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

## PRODUCT INFORMATION

**Antigen Description**

The protein encoded by this gene is a member of the RAD51 protein family. RAD51 family members are highly similar to bacterial RecA and *Saccharomyces cerevisiae* 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.

**Specificity**

RAD51 polyclonal antibody detects endogenous levels of RAD51D protein.

**Immunogen**

A synthetic peptide corresponding to RAD51.

**Source/Host**

Rat

**Species Reactivity**

Human

**Purification**

Antigen affinity purification

**Conjugate**

Unconjugated

**Applications**

WB (Cell lysate), IHC,

**Format**

Liquid

**Concentration**

1 mg/mL

**Size**

100  $\mu$ L

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<b>Buffer</b>	In PBS, pH 7.2 (0.05% sodium azide)
<b>Preservative</b>	0.05% Sodium Azide
<b>Storage</b>	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

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## GENE INFORMATION

<b>Gene Name</b>	<a href="#">RAD51 RAD51 recombinase [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	RAD51
<b>Synonyms</b>	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, <i>E. coli</i> , homolog of; BRCA1/BRCA2-containing complex, subunit 5;
<b>Entrez Gene ID</b>	<a href="#">5888</a>
<b>Protein Refseq</b>	<a href="#">NP_001157741</a>
<b>UniProt ID</b>	<a href="#">Q06609</a>
<b>Chromosome Location</b>	15q15.1
<b>Pathway</b>	Assembly of the RAD51-ssDNA nucleoprotein complex; Cell Cycle; DNA damage response; Fanconi anemia pathway
<b>Function</b>	ATP binding; DNA polymerase binding; damaged DNA binding; double-stranded DNA binding

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