



Product Information Sheet

Polyclonal Anti- DNA repair protein RAD51 homolog 1, **RAD51A**

Catalogue No. PA1219

Lot No. 09C01

Ig type rabbit IgG

Size 100µg/vial

Specificity

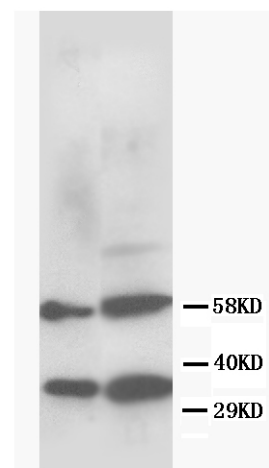
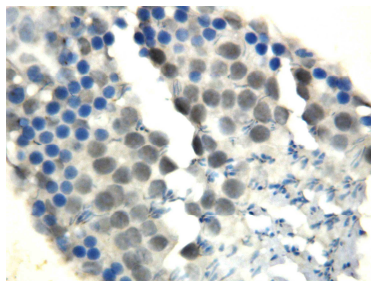
Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)



Lane 1 : Rat Testicular tissue Lysate
Lane 2 : HeLa Whole Cell Lysate

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminal of human RAD51A, different from the related rat sequence by one amino acid.

Purity

Immunogen affinity purified.

Application

	Concentration	Tested Species	Concluded Species	Antigen Retrieval
WB	1µg/ml	Hu, Rat	Ms	-
IHC-P	1-2µg/ml	Hu, Rat	Ms	By Heat
IHC-F	-	-	-	-
ICC	-	-	-	-

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

email: Info@antageneinc.com

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC AND CLINICAL USE.

BACKGROUND

DNA repair protein RAD51 homolog 1, also known as RAD51A, is a human gene. The Rad51 gene, HsRAD51, is a homolog of RecA of *Escherichia coli* and functions in recombination and DNA repair. BRCA1 and BRCA2 proteins form a complex with Rad51, and these genes are thought to participate in a common DNA damage response pathway associated with the activation of homologous recombination and double-strand break repair.¹ RAD51 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.²

REFERENCE

1. Kato, M.; Yano, K.; Matsuo, F.; Saito, H.; Katagiri, T.; Kurumizaka, H.; Yoshimoto, M.; Kasumi, F.; Akiyama, F.; Sakamoto, G.; Nagawa, H.; Nakamura, Y.; Miki, Y. : Identification of Rad51 alteration in patients with bilateral breast cancer. *J. Hum. Genet.* 45: 133-137, 2000.
2. Daniel DC (2002). "Highlight: BRCA1 and BRCA2 proteins in breast cancer.". *Microsc. Res. Tech.* 59 (1): 68–83.