Datasheet for ABIN3043560

anti-RAD51 antibody (AA 1-258)

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Overview

Quantity:	100 µg
Target:	RAD51
Binding Specificity:	AA 1-258
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RAD51 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	Anti-Rad51 Antibody Picoband®
Immunogen:	E.coli-derived human Rad51 recombinant protein (Position: M1-E258). Human Rad51 shares 98% amino acid (aa) sequence identity with mouse Rad51.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-Rad51 Antibody Picoband® (ABIN3043560). Tested in WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	RAD51
Alternative Name:	RAD51 (RAD51 Products)
Background:	Synonyms: DNA repair protein RAD51 homolog 1,HsRAD51,hRAD51,RAD51 homolog A,RAD51,RAD51A, RECA, Tissue Specificity: Highly expressed in testis and thymus, followed by small intestine, placenta, colon, pancreas and ovary. Weakly expressed in breast. 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. 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. Sequence Similarities: Belongs to the RecA family. RAD51 subfamily.
Molecular Weight:	37 kDa
Gene ID:	5888
UniProt:	Q06609
Pathways:	DNA Damage Repair

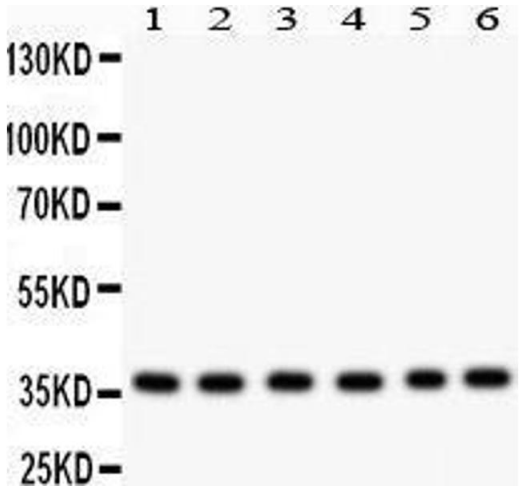
Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat 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.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

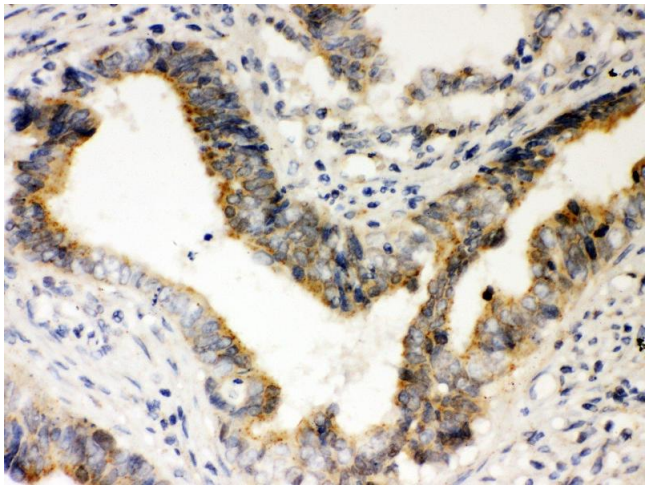
Images



Western Blotting

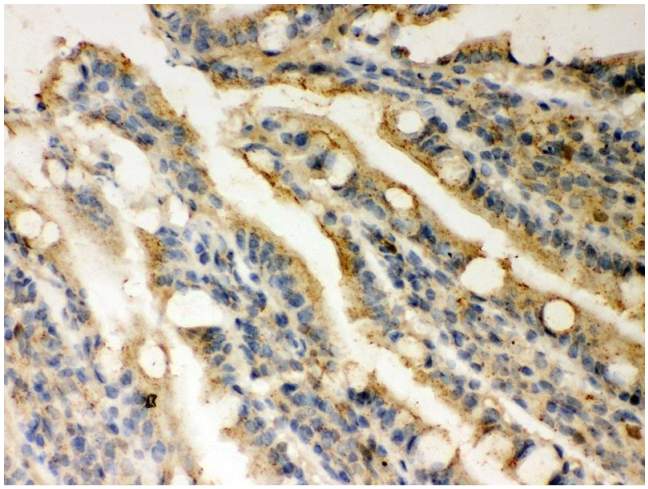
Image 1. Anti- Rad51 Picoband antibody, Western blotting All lanes: Anti Rad51 at 0.5ug/ml Lane 1: 22RV1 Whole Cell Lysate at 40ug Lane 2: SW620 Whole Cell Lysate at 40ug Lane 3: PANC Whole Cell Lysate at 40ug Lane 4: U87 Whole Cell Lysate at 40ug Lane 5: CEM Whole Cell Lysate at 40ug Lane 6: MM231 Whole Cell Lysate at 40ug Predicted bind size: 37KD Observed bind size: 37KD

Images



Immunohistochemistry

Image 2. Anti- Rad51 Picoband antibody, IHC(P) IHC(P): Human Intestinal Cancer Tissue



Immunohistochemistry

Image 3. Anti- Rad51 Picoband antibody, IHC(P) IHC(P): Rat Intestine Tissue