

## RAD50 Polyclonal Antibody

**Catalog No.** E-AB-60833

*Note:* Centrifuge before opening to ensure complete recovery of vial contents.

### Description

<b>Reactivity</b>	Human, Mouse, Rat
<b>Immunogen</b>	A synthetic peptide of human RAD50 (NP_005723.2).
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Purification</b>	Affinity purification
<b>Conjugation</b>	Unconjugated
<b>Buffer</b>	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

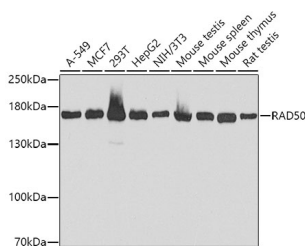
### Applications Recommended Dilution

**WB 1:500-1:2000 IHC**

**1:50-1:200 IF**

**1:50-1:200**

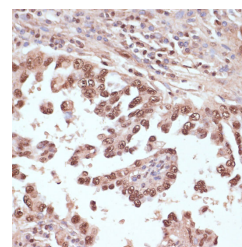
### Data



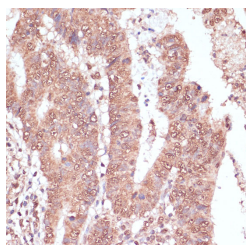
Western blot analysis of extracts of various cell lines using RAD50 Polyclonal Antibody at dilution of 1:1000.

**Observed Mw:170kDa**

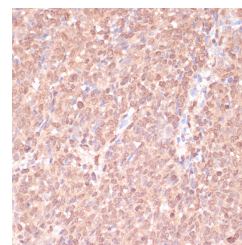
**Calculated Mw:138kDa/153kDa/154kDa**



Immunohistochemistry of paraffin-embedded Human lung cancer using RAD50 Polyclonal Antibody at dilution of 1:100 (40x lens).

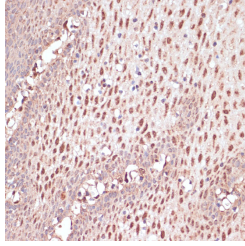


Immunohistochemistry of paraffin-embedded Human colon carcinoma using RAD50 Polyclonal Antibody at dilution of 1:100 (40x lens).

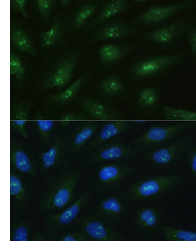


Immunohistochemistry of paraffin-embedded Human oophoroma using RAD50 Polyclonal Antibody at dilution of 1:100 (40x lens).

### For Research Use Only



Immunohistochemistry of paraffin-embedded Human esophageal using RAD50 Polyclonal Antibody at dilution of 1:100 (40x lens).



Immunofluorescence analysis of U2OS cells using RAD50 Polyclonal Antibody at dilution of 1:100. Blue: DAPI for nuclear staining.

## Preparation & Storage

**Storage** Store at -20°C. Avoid freeze / thaw cycles.

## Background

The protein encoded by this gene is highly similar to *Saccharomyces cerevisiae* Rad50, a protein involved in DNA double-strand break repair. This protein forms a complex with MRE11 and NBS1. The protein complex binds to DNA and displays numerous enzymatic activities that are required for nonhomologous joining of DNA ends. This protein, cooperating with its partners, is important for DNA double-strand break repair, cell cycle checkpoint activation, telomere maintenance, and meiotic recombination. Knockout studies of the mouse homolog suggest this gene is essential for cell growth and viability. Mutations in this gene are the cause of Nijmegen breakage syndrome-like disorder.

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