

## Anti-Rad50 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

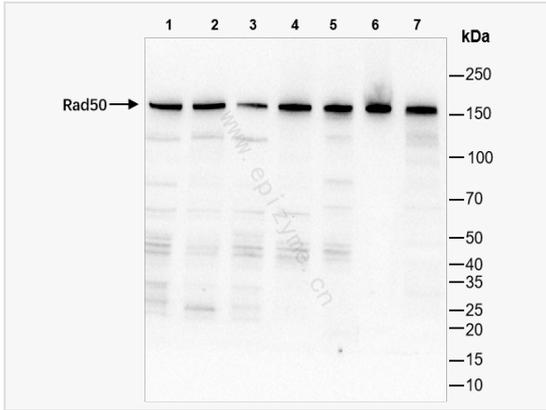
Catalog # R012600

### Product Information

Application	ELISA, WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	14L64M75
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Rad50
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Rad50 Rabbit mAb [14L64M75] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

Synonyms	DNA repair protein RAD50, hRAD50, hsRAD50, Mrell, NBSLD, Rad 50, RAD50 2, rad50, RAD50 homolog (S cerevisiae), RAD50 homolog, RAD50 PEN, RAD50, S. cerevisiae, homolog of, RAD50_HUMAN, RAD502, Rad50l, Truncated RAD50 protein.
Calculated MW	Calculated MW: 154 kDa; Observed MW: 154 kDa
Uniprot ID	Q92878
Gene ID	10111
Background	The protein encoded by this gene is highly similar to <i>Saccharomyces cerevisiae</i> 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.[provided by RefSeq, Apr 2010]
Cellular Location	Nucleus. Chromosome > telomere. Localizes to discrete nuclear foci after treatment with genotoxic agents.
Tissue Location	Expressed at very low level in most tissues, except in testis where it is expressed at higher level. Expressed in fibroblasts.



Western Blot - Anti-Rad50 Rabbit mAb [14L64M75]

All lanes: R012600 at 1:2,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: A431 (Human epidermoid teratoma cell line) whole cell lysates

Lane 5: T24 (Human bladder cancer epithelial cell) whole cell lysates

Lane 6: Rat kidney whole tissue lysates

Lane 7: Rat spleen whole tissue lysates

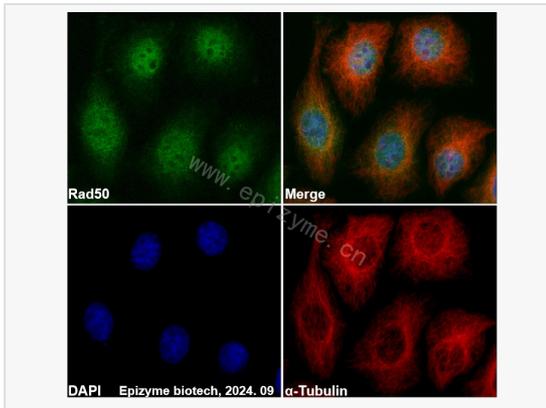
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 154 kDa

Observed band size: 154 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Rad50 Rabbit mAb [14L64M75]

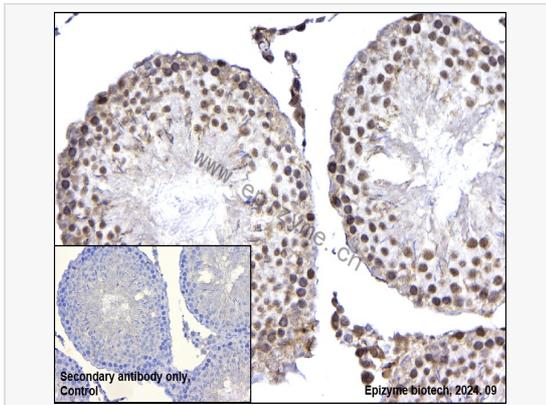
Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R012600 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-Rad50 Rabbit mAb [14L64M75]

Sample: Paraformaldehyde-fixed, paraffin embedded rat testis tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R012600 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.