

Product datasheet for **TA321721S**

RAD50 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 500-2000 WB positive control: 293T, Hela, K562, NIH/3T3 and RAW264.7 cells IHC: 50-200 Positive control: Human colon cancer Predicted cell location: Cytoplasm, Nucleus
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to a region derived from 325-339 amino acids of Human RAD50 homolog (<i>S. cerevisiae</i>)
Formulation:	PBS pH7.3, 0.05% NaN ₃ , 50% glycerol
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	154 kDa
Gene Name:	RAD50 double strand break repair protein
Database Link:	NP_005723 Entrez Gene 19360 Mouse Entrez Gene 64012 Rat Entrez Gene 10111 Human Q92878



[View online »](#)

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.

Synonyms:

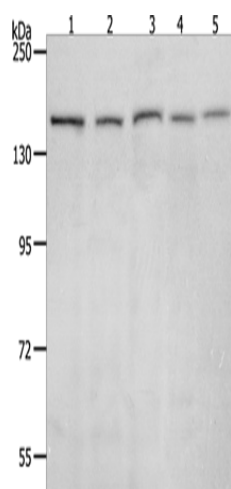
hRad50; NBSLD; RAD502

Protein Families:

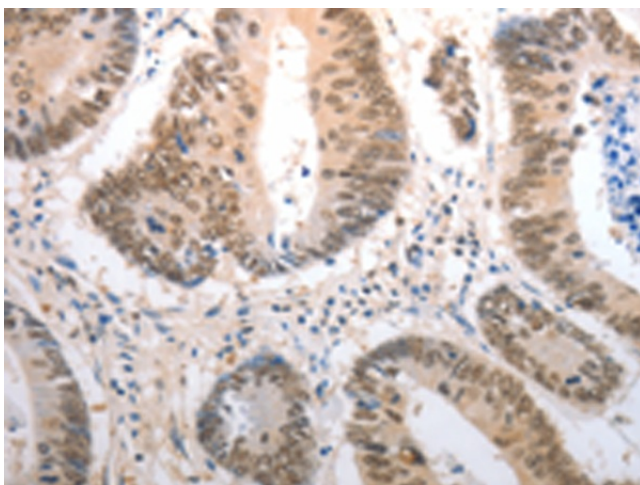
Druggable Genome

Protein Pathways:

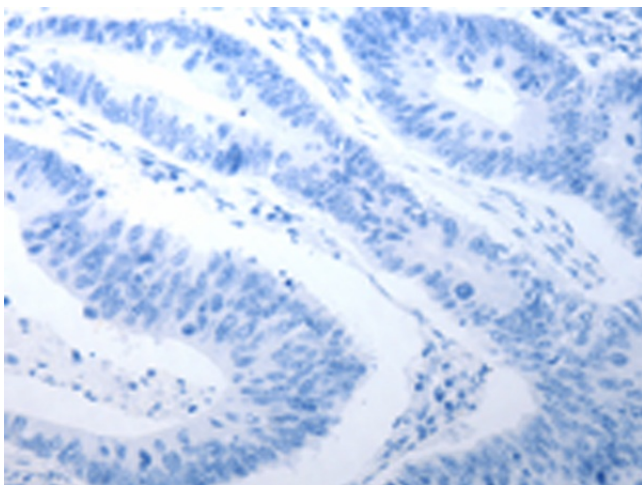
Homologous recombination, Non-homologous end-joining

Product images:

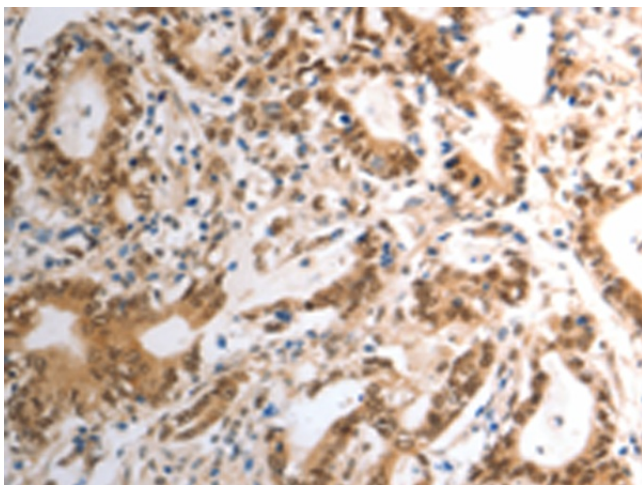
Gel: 8%SDS-PAGE
Lysate: 40 μ g
Lane 1-5: 293T cells
Hela cells
K562 cells
NIH/3T3 cells
RAW264.7 cells
Primary antibody: [TA321721] (RAD50 Antibody) at dilution 1/900
Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution
Exposure time: 5 minutes



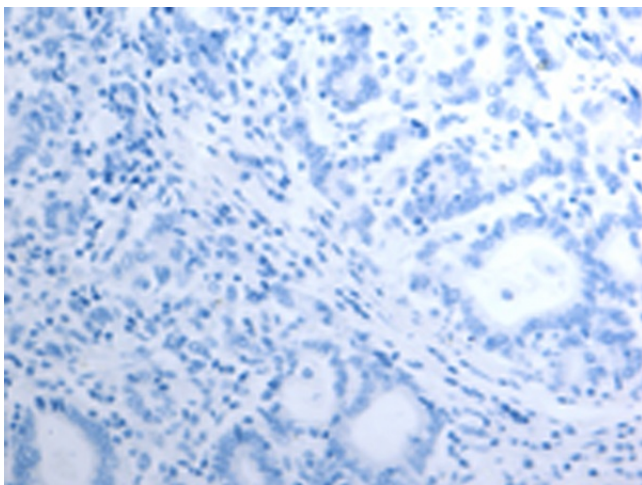
Immunohistochemistry of paraffin-embedded Human colon cancer tissue using [TA321721] (RAD50 Antibody) at dilution 1/40 (Original magnification: \times 200)



Immunohistochemistry of paraffin-embedded Human colon cancer tissue using [TA321721] (RAD50 Antibody) at dilution 1/40, treated with synthetic peptide. (Original magnification: x200)



Immunohistochemistry of paraffin-embedded Human gastric cancer tissue using [TA321721] (RAD50 Antibody) at dilution 1/40 (Original magnification: x200)



Immunohistochemistry of paraffin-embedded Human gastric cancer tissue using [TA321721] (RAD50 Antibody) at dilution 1/40, treated with synthetic peptide. (Original magnification: x200)