

## Rad50 rabbit pAb

**Cat#: orb766181 (Manual)**

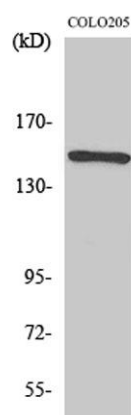
For research use only. Not intended for diagnostic use.

<b>Product Name</b>	Rad50 rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human RAD50. AA range:681-730
<b>Specificity</b>	Rad50 Polyclonal Antibody detects endogenous levels of Rad50 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	DNA repair protein RAD50
<b>Gene Name</b>	RAD50
<b>Cellular localization</b>	Nucleus . Chromosome, telomere . Chromosome . Localizes to discrete nuclear foci after treatment with genotoxic agents. .
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal

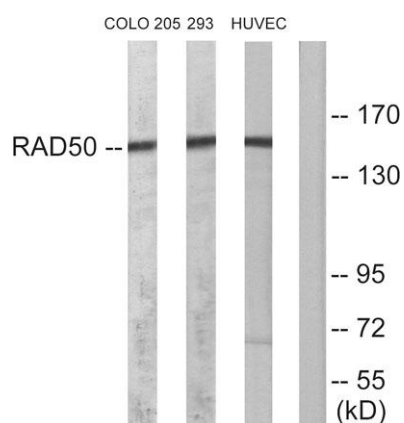
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	153kD
<b>Human Gene ID</b>	10111
<b>Human Swiss-Prot Number</b>	Q92878
<b>Alternative Names</b>	RAD50; DNA repair protein RAD50; hRAD50

### Background

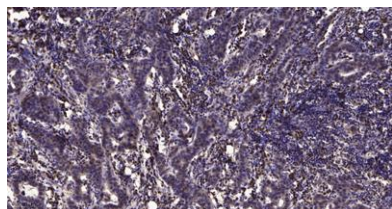
**RAD50 double strand break repair protein(RAD50) Homo sapiens** The protein encoded by this gene is highly similar to *Saccharomyces cerevisiae* Rad50, a protein involved in DNA double-strand break repair. This protein forms a complex with MRE11 and NBS1. The protein complex binds to DNA and displays 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.[provided by RefSeq, Apr 2010],



**Western Blot analysis of various cells using Rad50 Polyclonal Antibody diluted at 1:1000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).**



**Western blot analysis of lysates from COLO205, 293, and HUVEC cells, using RAD50 Antibody. The lane on the right is blocked with the synthesized peptide.**



**Immunohistochemical analysis of paraffin-embedded human Breast cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).**