

Product name:	RAD50 Mouse Monoclonal Antibody
Cat number:	MABN81643
Conjugate:	Unconjugated
Size:	100μL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Mouse
Isotype:	Mouse IgG2a
Immunogen:	Purified recombinant fragment of human RAD50 (AA: 228-359) expressed in E. Coli.
Reactivity:	Human,Rat
Applications:	WB 1:500-1:2000,IHC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight:	154kDa
Purification:	Affinity Purification
Form:	Liquid
Buffer:	Purified antibody in PBS with 0.05% sodium azide
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
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.