Product Name: KD-Validated RAD50 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01308
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 153.9kDa

Antigen Information

Gene Name	RAD50
Alternative Names	RAD50; RAD50 Double Strand Break Repair Protein; RAD50 Homolog, Double Strand Break Repair Protein; DNA Repair Protein RAD50; RAD50-2; HRad50; HRAD50; RAD50 (S. Cerevisiae) Homolog; RAD50 Homolog (S. Cerevisiae); EC 3.6.3.27; EC 3.6.1.15; EC 3.6.-.-; EC 3.6.3; RAD502; NBSLD
Gene ID	10111.0
SwissProt ID	Q92878
Immunogen	A synthesized peptide derived from human Rad50

Background

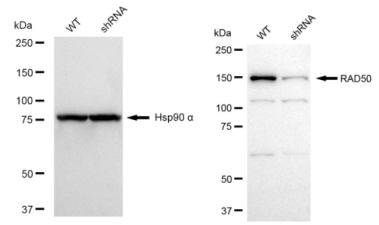
The protein encoded by this gene is highly similar to Saccharomyces cerevisiae Rad50, a protein involved in DNA double-strand

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.[provided by RefSeq, Apr 2010]

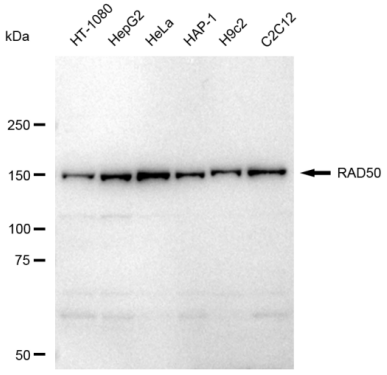
Research Area

Epigenetics and Nuclear Signaling

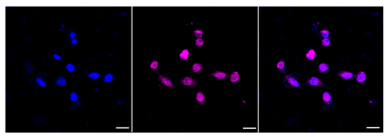
Image Data



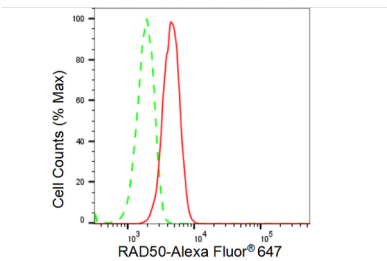
Western blotting analysis using RAD50 antibody (KVAb01308). RAD50 expression in wild type (WT) and RAD50 shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with RAD50 antibody (KVAb01308, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using RAD50 antibody (KVAb01308). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with RAD50 antibody (KVAb01308, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells with RAD50 antibody (KVAb01308, 1:1,000). Nuclei were stained blue with DAPI; RAD50 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Flow cytometric analysis of RAD50 expression in HeLa cells using RAD50 antibody (KVAb01308, 1:2,000). Green, isotype control; red, RAD50.