

Anti-RAD50 Antibody

EM1707-66



Product Type:	Mouse monoclonal IgG2a, primary antibodies
Species reactivity:	Human, Rat
Applications:	WB, IHC-P, FC
Molecular Wt:	154 kDa

Description: Rad52 family members (Rad50, Rad51B/C/D, Rad52, Rad54, MRE11) mediate DNA double-strand break repair (DSBR) for DNA damage that otherwise could cause cell death, mutation or neoplastic transformation. Rad51 (RECA, BRCC5) interacts with BRCA1 and BRCA2 to influence subcellular localization and cellular response to DNA damage. BRCA2 inactivation may be a key event leading to genomic instability and tumorigenesis from deregulation of Rad51. Rad52 forms a heptameric ring that binds single-stranded DNA ends and catalyzes DNA-DNA interaction necessary for the annealing of complementary strands. Rad54A of the DEAD-like helicase superfamily binds to double-stranded DNA and induces a DNA topological change, which is thought to facilitate homologous DNA pairing and stimulate DNA recombination. Rad54B of the DEAD-like helicase superfamily binds to double-stranded DNA and displays ATPase activity in the presence of DNA. Rad54B is abundant in testis and spleen, and mutations of this gene occur in primary lymphoma and colon cancer.

Immunogen: Recombinant protein

Positive control: Human RAD50 recombinant protein, RAD50-hIgGFc transfected HEK293 cell lysate, C6, HepG2, HeLa, human esophageal cancer tissue, human rectum cancer tissue.

Subcellular location: Nucleus.

Database links: SwissProt: Q92878 Human

Recommended Dilutions:

WB	1:500-1:2,000
IHC-P	1:50-1:200
FC	1:100-1:200

Storage Buffer: Purified antibody in PBS with 0.05% sodium azide.

Storage Instruction: 4°C; -20°C for long term storage.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

 华安生物
HUABIO
www.huabio.cn

Images

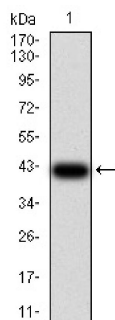


Fig1: Western blot analysis of RAD50 on human RAD50 recombinant protein using anti-RAD50 antibody at 1/1,000 dilution.

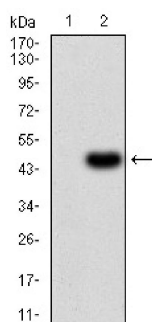


Fig2: Western blot analysis of RAD50 on HEK293 (1) and RAD50-hlgGfc transfected HEK293 (2) cell lysate using anti-RAD50 antibody at 1/1,000 dilution.

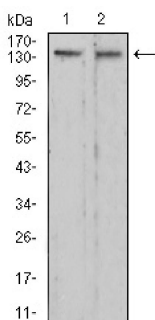


Fig3: Western blot analysis of RAD50 on C6 (1) and HepG2 (2) cell lysate using anti-RAD50 antibody at 1/1,000 dilution.

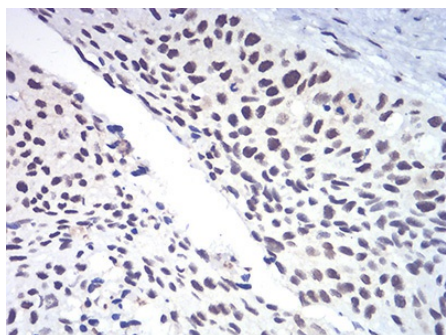


Fig4: Immunohistochemical analysis of paraffin-embedded human esophageal cancer tissue using anti-RAD50 antibody. Counter stained with hematoxylin.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

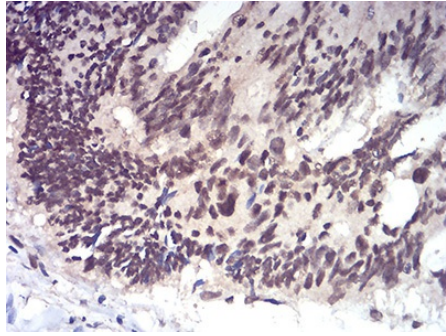


Fig5: Immunohistochemical analysis of paraffin-embedded human rectum cancer tissue using anti-RAD50 antibody. Counter stained with hematoxylin.

Note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

Background References

1. Chang L et al. Targeting Rad50 sensitizes human nasopharyngeal carcinoma cells to radiotherapy. *BMC Cancer* 16:190 (2016).
2. Clynes D et al. Suppression of the alternative lengthening of telomere pathway by the chromatin remodelling factor ATRX. *Nat Commun* 6:7538 (2015).

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn