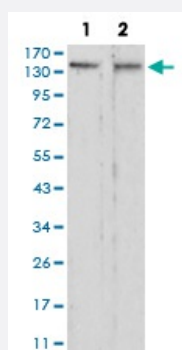


RAD50 monoclonal antibody, clone 3D2G10

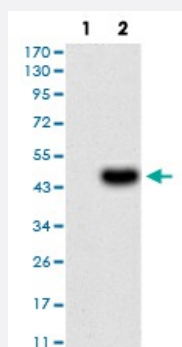
Catalog # MAB17199 Size 100 ug

Applications



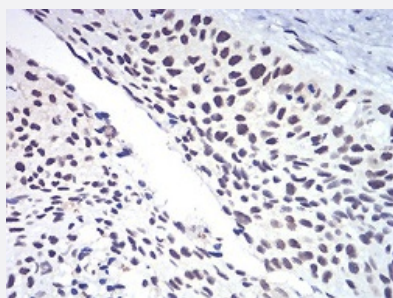
Western Blot (Cell lysate)

Western blot analysis of Lane 1: C6 cell; Lane 2: HepG2 cell with RAD50 monoclonal antibody.



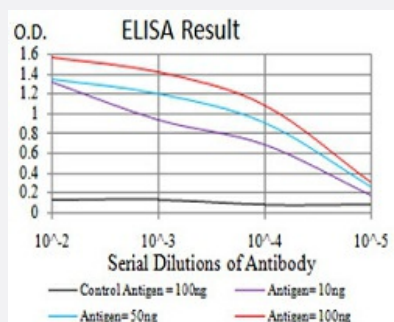
Western Blot (Transfected lysate)

Western Blot analysis of (1) HEK293 cells, (2) RAD50-hlgGfc transfected HEK293 cell lysate.



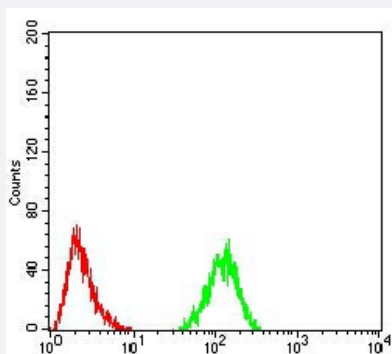
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of paraffin-embedded esophageal cancer tissues with RAD50 monoclonal antibody.



Enzyme-linked Immunoabsorbent Assay

ELISA analysis of RAD50 monoclonal antibody, clone 3D2G10.



Flow Cytometry

Flow cytometric analysis of HeLa cells with RAD50 monoclonal antibody (green) and negative control (red).

Specification

Product Description	Mouse monoclonal antibody raised against recombinant human RAD50.
Immunogen	Recombinant protein corresponding to amino acid 228-359 of human RAD50 from <i>E. coli</i> .
Host	Mouse
Theoretical MW (kDa)	154kDa
Reactivity	Human, Rat
Form	Liquid
Isotype	IgG2a
Recommend Usage	ELISA (1:10000) Western Blot (1:500-1:2000) Immunohistochemistry (1:200-1:1000) Immunocytochemistry Flow Cytometry (1:200-1:400) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.05% sodium azide).
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of Lane 1: C6 cell; Lane 2: HepG2 cell with RAD50 monoclonal antibody.

- Western Blot (Transfected lysate)

Western Blot analysis of (1) HEK293 cells, (2) RAD50-hlgGfc transfected HEK293 cell lysate.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of paraffin-embedded esophageal cancer tissues with RAD50 monoclonal antibody.

- Enzyme-linked Immunoabsorbent Assay

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- Flow Cytometry

Flow cytometric analysis of HeLa cells with RAD50 monoclonal antibody (green) and negative control (red).

Gene Info — RAD50

Entrez GeneID [10111](#)

Gene Name RAD50

Gene Alias RAD50-2, hRad50

Gene Description RAD50 homolog (S. cerevisiae)

Omim ID [604040](#)

Gene Ontology [Hyperlink](#)

Gene Summary 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. Two alternatively spliced transcript variants of this gene, which encode distinct proteins, have been reported. [provided by RefSeq]

Other Designations OTTHUMP00000065928|RAD50 homolog

Pathway

- [Homologous recombination](#)

- [Non-homologous end-joining](#)

Disease

- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Asthma](#)
- [Ataxia telangiectasia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchiolitis](#)
- [Carcinoma](#)
- [DNA Damage](#)
- [Genetic Predisposition to Disease](#)
- [Glioma](#)
- [Hematologic Diseases](#)
- [Hodgkin Disease](#)
- [Kidney Failure](#)
- [Leukemia](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Malaria](#)
- [Neoplasms](#)
- [Occupational Diseases](#)
- [Ovarian cancer](#)

- [Ovarian Neoplasms](#)
- [Pancreatic Neoplasms](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Respiratory Syncytial Virus Infections](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)