Anti-Rad51 Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

Catalog # M014684

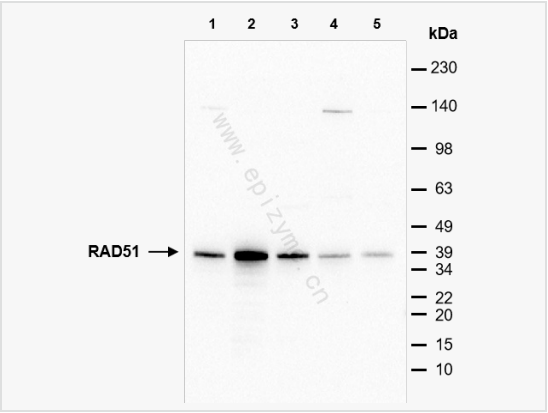
Product Information

Application	WB, IHC-P/IF (Tissue-P), ELISA
Reactivity	Mouse (Cell), Human
Dilution	WB 1:1,000~1:4,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Mouse
Clonality	Monoclonal
Clone No.	36Q01I01
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human Rad51
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Rad51 Mouse mAb [36Q01I01] is for research use only and not for use in diagnostic or therapeutic procedures.

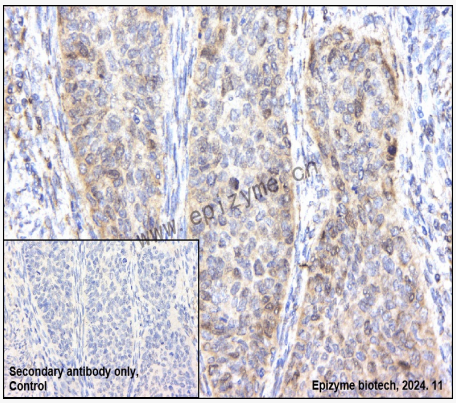
Protein Information

Synonyms	BRCA1/BRCA2 containing complex, subunit 5, BRCC 5, BRCC5, DNA repair protein RAD51 homolog 1, DNA repair protein rhp51, FANCR, hRAD51, HsRAD51, HsT16930, MRMV2, Rad 51, RAD51, RAD51 homolog (RecA homolog, E. coli) (S. cerevisiae), RAD51 homolog A, RAD51 homolog, RAD51 recombinase, RAD51, S. cerevisiae, homolog of, RAD51_HUMAN, RAD51A, RECA, RecA like protein, RecA, E. coli, homolog of, Recombination protein A.
Calculated MW	Calculated MW: 37 kDa; Observed MW: 37 kDa
Uniprot ID	Q06609
Gene ID	5888
Background	Plays an important role in homologous strand exchange, a key step in DNA repair through homologous recombination (HR) (PubMed:28575658). Binds to single and double-stranded DNA and exhibits DNA-dependent ATPase activity. Catalyzes the recognition of homology and strand exchange between homologous DNA partners to form a joint molecule between a processed DNA break and the repair template. Binds to single-stranded DNA in an ATP-dependent manner to form nucleoprotein filaments which are essential for the homology search and strand exchange (PubMed:26681308). Part of a PALB2-scaffolded HR complex containing BRCA2 and RAD51C and which is thought to play a role in DNA repair by HR. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51C and XRCC3. Also involved in interstrand cross-link repair (PubMed:26253028).
Cellular Location	Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Mitochondrion matrix. Cytoplasm, cytoskeleton, microtubule organizing

Validation Images



Western Blot - Anti-Rad51 Mouse mAb [36Q01I01]
All lanes: M014684 at 1:4,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates
Lane 3: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates
Lane 4: U2OS (Human osteosarcoma epithelial cell) whole cell lysates
Lane 5: T24 (Human bladder cancer epithelial cell) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP Conjugated (Cat. No. LF101) at 1:5,000 dilution
Predicted band size: 37 kDa
Observed band size: 37 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-Rad51 Mouse mAb [36Q01I01]
Sample: Paraformaldehyde-fixed, paraffin embedded human cervical cancer tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: M014684 at 1:200 dilution
Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.