

**RAD51 Antibody (monoclonal) (M01)****Mouse monoclonal antibody raised against a full length recombinant RAD51.****Catalog # AT3548a****Specification**

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**RAD51 Antibody (monoclonal) (M01) - Product Information**

|                   |                          |
|-------------------|--------------------------|
| Application       | WB, E                    |
| Primary Accession | <a href="#">Q06609</a>   |
| Other Accession   | <a href="#">BC001459</a> |
| Reactivity        | Human                    |
| Host              | mouse                    |
| Clonality         | Monoclonal               |
| Isotype           | IgG1 Kappa               |
| Calculated MW     | 36966                    |

**RAD51 Antibody (monoclonal) (M01) - Additional Information****Gene ID** 5888**Other Names**

DNA repair protein RAD51 homolog 1, HsRAD51, hRAD51, RAD51 homolog A, RAD51, RAD51A, RECA

**Target/Specificity**

RAD51 (AAH01459, 1 a.a. ~ 242 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution**

WB~~1:500~1000

E~~N/A

**Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

**Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions**

RAD51 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

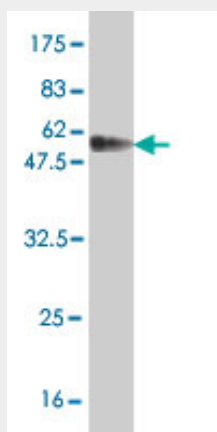
**RAD51 Antibody (monoclonal) (M01) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

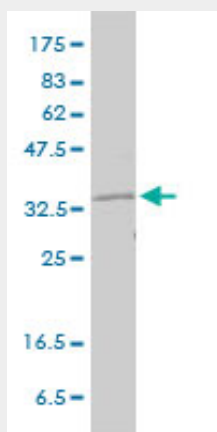
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

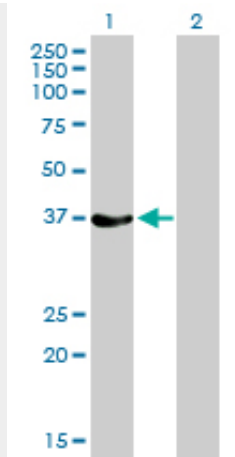
#### **RAD51 Antibody (monoclonal) (M01) - Images**



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (52.36 kDa) .



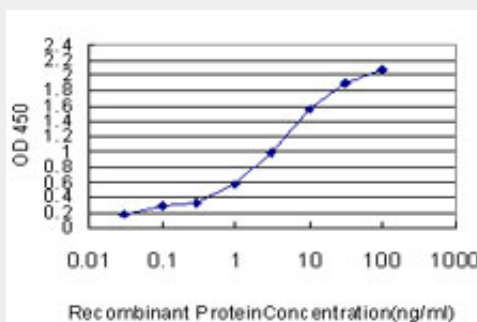
RAD51 monoclonal antibody (M01), clone 2E5-E5 Western Blot analysis of RAD51 expression in HeLa ( (Cat # AT3548a )



Western Blot analysis of RAD51 expression in transfected 293T cell line by RAD51 monoclonal antibody (M01), clone 2E5-E5.

Lane 1: RAD51 transfected lysate(37 KDa).

Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged RAD51 is approximately 0.03ng/ml as a capture antibody.

### **RAD51 Antibody (monoclonal) (M01) - Background**

The protein encoded by this gene is a member of the RAD51 protein family. RAD51 family members are highly similar to bacterial RecA and *Saccharomyces cerevisiae* Rad51, and are known to be involved in the homologous recombination and repair of DNA. This protein can interact with the ssDNA-binding protein RPA and RAD52, and it is thought to play roles in homologous pairing and strand transfer of DNA. This protein is also found to interact with BRCA1 and BRCA2, which may be important for the cellular response to DNA damage. BRCA2 is shown to regulate both the intracellular localization and DNA-binding ability of this protein. Loss of these controls following BRCA2 inactivation may be a key event leading to genomic instability and tumorigenesis. Multiple transcript variants encoding different isoforms have been found for this gene.

### **RAD51 Antibody (monoclonal) (M01) - References**

Polymorphisms of the XRCC3 C722T and the RAD51 G135C genes and the risk of head and neck cancer in a Polish population. Sliwinski T, et al. *Exp Mol Pathol*, 2010 Sep 6. PMID 20804747. A large-scale candidate gene approach identifies SNPs in SOD2 and IL13 as predictive markers of response to preoperative chemoradiation in rectal cancer. Ho-Pun-Cheung A, et al. *Pharmacogenomics J*, 2010 Jul 20. PMID 20644561. RAD51 135G/C polymorphism and breast cancer risk: a meta-analysis from 21 studies. Gao LB, et al. *Breast Cancer Res Treat*, 2010 Jul 17. PMID 20640595. RAD51 135G>C polymorphism and breast cancer risk: a meta-analysis. Zhou GW, et al.

Breast Cancer Res Treat, 2010 Jul 11. PMID 20623332. Gamma-Radiation Sensitivity and Polymorphisms in RAD51L1 Modulate Glioma Risk. Liu Y, et al. Carcinogenesis, 2010 Jul 7. PMID 20610542.