

# Datasheet: VMA00534KT

| Description:  | RAD51 ANTIBODY WITH CONTROL LYSATE |  |  |
|---------------|------------------------------------|--|--|
| Specificity:  | RAD51                              |  |  |
| Format:       | Purified                           |  |  |
| Product Type: | PrecisionAb™ Monoclonal            |  |  |
| Clone:        | AB02/1A3                           |  |  |
| lsotype:      | lgG1                               |  |  |
| Quantity:     | 2 Westerns                         |  |  |

## **Product Details**

| Applications                | This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol   |                      |    |                |                              |  |
|-----------------------------|--|----------------------|----|----------------|------------------------------|--|
|                             | recommendations, please visit www.bio-rad-antibodies.com/protocols.  |                      |    |                |                              |  |
|                             | Western Blotting   | Yes                  | No | Not Determined | Suggested Dilution<br>1/1000 |  |
|                             | <b>PrecisionAb antibodies have been extensively</b> <u>validated for the western blot application</u> . The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type. |                      |    |                |                              |  |
| Target Species              | Human  |                      |    |                |                              |  |
| Product Form                | Purified IgG - liquid  |                      |    |                |                              |  |
| Preparation                 | 20µI Mouse monoclonal antibody purified by affinity chromatography on Protein G from tissue culture supernatant  |                      |    |                |                              |  |
| Buffer Solution             | Phosphate buffered saline  |                      |    |                |                              |  |
| Preservative<br>Stabilisers | 0.09% Sodium Azide (NaN <sub>3</sub> )   |                      |    |                |                              |  |
| Immunogen                   | <i>E. coli</i> -derived recombinant human RAD51 (amino acids 1 - 339)  |                      |    |                |                              |  |
| External Database<br>Links  | UniProt:<br><u>Q06609</u> <u>Related rea</u><br>Entrez Gene:<br><u>5888</u> RAD51 <u>Related</u>   | agents<br>d reagents |    |                |                              |  |
| Synonyms                    | RAD51A, RECA   |                      |    |                |                              |  |

| Specificity                      | <b>Mouse anti Human RAD51 antibody</b> recognizes the DNA repair protein RAD51 homolog 1, also known as BRCA1/BRCA2-containing complex,subunit 5, RAD51 homolog A, RecA E. coli or recombination protein A.   |
|----------------------------------|---|
|                                  | The protein encoded by RAD51 gene is a member of the RAD51 protein family. RAD51 family members are highly similar to bacterial RecA and Saccharomyces cerevisiae Rad51. 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 RAD51 (provided by RefSeq, Aug 2009). |
|                                  | Mouse anti Human RAD51 antibody detects a band of 37 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.  |
| Western Blotting                 | Anti RAD51 detects a band of approximately 37 kDa in Jurkat cell lysates  |
| Instructions For Use             | Please refer to the <u>PrecisionAb western blotting protocol.</u> For additional information on secondary antibody dilution and exposure time see product web page.   |
| Lysate Composition               | 400µg Jurkat lysate lyophilized in RIPA buffer  |
| Lysate Reconstitution            | <ul> <li>If using DDT reconstitute the lyophilized lysate with 190µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.</li> <li>If using BME reconstitute the lyophilized lysate with 180µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 20µl BME.</li> <li>Heat at 95°C for 5 minutes. For 10 well mini gels load 25µl. For other gel and comb formats please refer to the PrecisionAb western blotting protocol.</li> </ul>   |
| Storage                          | Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.   |
|                                  | Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for up to 3 months or at -80°C for longer term storage.  |
| Guarantee                        | As supplied, 12 months from date of despatch.   |
| Acknowledgements                 | PrecisionAb™ is a trademark of Bio-Rad Laboratories.  |
| Health And Safety<br>Information | Material Safety Datasheet documentation #10040 #10561 available at:<br>Antibody (10040): <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</u><br>Lysate Material (10561): <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf</u>  |
| Regulatory                       | For research purposes only  |

## **Related Products**

### **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (H/L) (STAR207...) <u>HRP</u>

**Recommended Negative Controls** 

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Worldwide

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