

Datasheet: VMA00591KT

Description:	RAD50 ANTIBODY WITH CONTROL LYSATE
Specificity:	RAD50
Format:	Purified
Product Type:	PrecisionAb™ Monoclonal
Isotype:	lgG2b
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.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	•			1/1000

PrecisionAb antibodies have been extensively <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 dependant on sample type.

Target Species	Human
Species Cross Reactivity	Reacts with: Mouse N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	20μl Mouse monoclonal antibody purified by affinity chromatography Protein G from ascites
Buffer Solution	HEPES buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin <50% Glycerol
Immunogen	E. coli-derived recombinant human RAD50
External Database Links	UniProt: Q92878 Related reagents Entrez Gene: 10111 RAD50 Related reagents

Specificity

Mouse anti Human RAD50 antibody recognizes the DNA repair protein RAD50.

The protein encoded by RAD50 is highly similar to *S. 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 RAD50 is essential for cell growth and viability. Mutations in RAD50 are the cause of Nijmegen breakage syndrome-like disorder (provided by RefSeq, Apr 2010).

Mouse anti Human RAD50 antibody detects a band of 163 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

Western Blotting	Anti RAD50 detects a band of approximately 163 kDa in K562 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 K562 lysate lyophilized in RIPA buffer
Lysate Reconstitution	- If using DDT reconstitute the lyophilized lysate with 190 μ l DI H ₂ O, add 200 μ l 2x Laemmli Sample Buffer and 10 μ l 2M DTT.
	- If using BME reconstitute the lyophilized lysate with 180 μ l DI H $_2$ O, add 200 μ l 2x Laemmli Sample Buffer and 20 μ l BME.
	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.
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 Information	Material Safety Datasheet documentation #20359 #10561 available at: Antibody (20359): https://www.bio-rad-antibodies.com/uploads/MSDS/20359.pdf Lysate Material (10561): https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

MOUSE IgG2b NEGATIVE CONTROL (MCA691)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 'M338245:181217'

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