

Technical Data Sheet

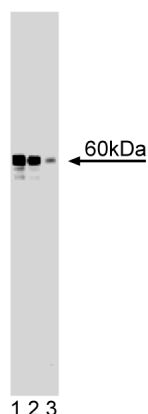
Purified Mouse Anti-hRAD9

Product Information

Material Number:	611324
Size:	50 µg
Concentration:	250 µg/ml
Clone:	56/hRad9
Immunogen:	Human hRAD9 aa. 264-370
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat
Target MW:	60 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Cell cycle checkpoints are regulatory mechanisms that prevent cell cycle progression in the presence of DNA damage or incompletely replicated DNA. Many of the genes required for cell-cycle arrest are also involved in DNA repair, apoptosis, and induction of transcription. In yeast and humans, hRAD9 plays a role in cell cycle arrest during the G2 phase before entry into mitosis. Phosphorylated hRAD9 is found in the nucleus after DNA damage, and forms DNA damage-responsive complexes with other putative checkpoint control proteins, such as hRAD1 and hHUS1. Expression of hRAD9 in *S. pombe rad9::ura4+* cells restores resistance to the DNA synthesis inhibitor hydroxyurea and gamma rays. In addition, hRAD9 binds the anti-apoptotic proteins, Bcl-2 and Bcl-xL, and antisense hRAD9 RNA suppresses DNA-damage induced cell death. Thus, hRAD9 may be an important component of protein complexes that regulate cell cycle progression, as well as apoptosis, in response to DNA damage.



Western blot analysis of hRAD9 on a human endothelial cell lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-hRAD9 antibody.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at -20° C.

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharming/en/protocols/Western_Blotting.shtml

BD Biosciences

www.bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit www.bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2007 BD



Suggested Companion Products

Catalog Number	Name	Size	Clone
611450	Human Endothelial Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Komatsu K, Miyashita T, Hang H. Human homologue of S. pombe Rad9 interacts with BCL-2/BCL-xL and promotes apoptosis. *Nat Cell Biol.* 2000; 2(1):1-6. (Biology)

Lieberman HB, Hopkins KM, Nass M, Demetrick D, Davey S. A human homolog of the Schizosaccharomyces pombe rad9+ checkpoint control gene. *Proc Natl Acad Sci U S A.* 1996; 93(24):13890-13895.(Biology)

St Onge RP, Udell CM, Casselman R, Davey S. The human G2 checkpoint control protein hRAD9 is a nuclear phosphoprotein that forms complexes with hRAD1 and hHUS1. *Mol Cell Biol.* 1999; 10(6):1985-1995.(Biology)

Volkmer E, Karnitz LM. Human homologs of Schizosaccharomyces pombe rad1, hus1, and rad9 form a DNA damage-responsive protein complex. *J Biol Chem.* 1999; 274(2):567-570.(Biology)

Yoshida K, Komatsu K, Wang HG, Kufe D. c-Abl tyrosine kinase regulates the human Rad9 checkpoint protein in response to DNA damage. *Mol Cell Biol.* 2002; 22(10):3292-32300.(Biology: Immunoprecipitation, Western blot)