Datasheet for ABIN968473

anti-RAD9A antibody (AA 264-370)

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Overview

Quantity:	50 µg
Target:	RAD9A
Binding Specificity:	AA 264-370
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This RAD9A antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human hRAD9 aa. 264-370
Clone:	56-hRad9
Isotype:	IgG1
Cross-Reactivity:	Mouse (Murine), Rat (Rattus)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us 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.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

chromatography.

Target Details

Target:	RAD9A
Alternative Name:	hRad9 (RAD9A Products)
Background:	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.
Molecular Weight:	60 kDa
Pathways:	Positive Regulation of Response to DNA Damage Stimulus

Application Details

Comment:	Related Products: ABIN968536, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Handling

Storage Comment:	Store undiluted at -20° C.

Publications

Product cited in:

Yoshida, Komatsu, Wang, Kufe: "c-Abl tyrosine kinase regulates the human Rad9 checkpoint protein in response to DNA damage." in: **Molecular and cellular biology**, Vol. 22, Issue 10, pp. 3292-300, (2002) (PubMed).

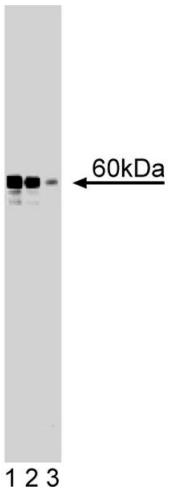
Komatsu, Miyashita, Hang, Hopkins, Zheng, Cuddeback, Yamada, Lieberman, Wang: "Human homologue of S. pombe Rad9 interacts with BCL-2/BCL-xL and promotes apoptosis." in: **Nature cell biology**, Vol. 2, Issue 1, pp. 1-6, (2000) (PubMed).

Volkmer, Karnitz: "Human homologs of Schizosaccharomyces pombe rad1, hus1, and rad9 form a DNA damage-responsive protein complex." in: **The Journal of biological chemistry**, Vol. 274, Issue 2, pp. 567-70, (1999) (PubMed).

St Onge, Udell, Casselman, Davey: "The human G2 checkpoint control protein hRAD9 is a nuclear phosphoprotein that forms complexes with hRAD1 and hHUS1." in: **Molecular biology of the cell**, Vol. 10, Issue 6, pp. 1985-95, (1999) (PubMed).

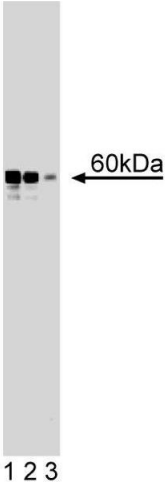
Lieberman, Hopkins, Nass, Demetrick, Davey: "A human homolog of the Schizosaccharomyces pombe rad9+ checkpoint control gene." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 93, Issue 24, pp. 13890-5, (1997) (PubMed).

Images



Western Blotting

Image 1.



Western Blotting

Image 2. 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.

Image 3.

