# RAD9A (phospho S272) polyclonal antibody

Catalog # PAB0581 Size 400 uL

## Applications



### Western Blot (Cell lysate)

The RAD9A (phospho S272) polyclonal antibody (Cat # PAB0581) is used in Western blot to detect Phospho-RAD9A-S272 in HL-60 (left), Hela (middle), and Y-79 (right) cell lysates.



### Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with RAD9A (phospho S272) polyclonal antibody (Cat # PAB0581) which was peroxidase-conjugated to the secondary antibody followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. HC = hepatocarcinoma.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of RAD9A.
Immunogen	Synthetic phosphopeptide (conjugated with KLH) corresponding to residues surrounding S272 of hu man RAD9A.
Host	Rabbit
Reactivity	Human
Form	Liquid



### **Product Information**

Purification	Protein G purification
Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:10-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

### **Applications**

#### • Western Blot (Cell lysate)

The RAD9A (phospho S272) polyclonal antibody (Cat # PAB0581) is used in Western blot to detect Phospho-RAD9A-S272 in HL-60 (left), Hela (middle), and Y-79 (right) cell lysates.

• Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with RAD9A (phospho S272) polyclonal antibody (Cat # PAB0581) which was peroxidase-conjugated to the secondary antibody followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. HC = hepatocarcinoma.

### Gene Info — RAD9A

Entrez GenelD	<u>5883</u>
Protein Accession#	<u>NP_004575;Q99638</u>
Gene Name	RAD9A
Gene Alias	RAD9
Gene Description	RAD9 homolog A (S. pombe)
Omim ID	<u>603761</u>
Gene Ontology	<u>Hyperlink</u>



### **Product Information**

**Gene Summary** 

This gene product is highly similar to Schizosaccharomyces pombe rad9, a cell cycle checkpoint protein required for cell cycle arrest and DNA damage repair in response to DNA damage. This p rotein is found to possess 3' to 5' exonuclease activity, which may contribute to its role in sensing and repairing DNA damage. It forms a checkpoint protein complex with RAD1 and HUS1. This co mplex is recruited by checkpoint protein RAD17 to the sites of DNA damage, which is thought to be important for triggering the checkpoint-signaling cascade. Use of alternative polyA sites has b een noted for this gene. [provided by RefSeq

**Other Designations** 

RAD9 homolog|cell cycle checkpoint control protein

### **Publication Reference**

Accumulation of hRad9 protein in the nuclei of nonsmall cell lung carcinoma cells.

Maniwa Y, Yoshimura M, Bermudez VP, Yuki T, Okada K, Kanomata N, Ohbayashi C, Hayashi Y, Hurwitz J, Okita Y. Cancer 2005 Jan; 103(1):126.

The human Rad9-Rad1-Hus1 checkpoint complex stimulates flap endonuclease 1.

Wang W, Brandt P, Rossi ML, Lindsey-Boltz L, Podust V, Fanning E, Sancar A, Bambara RA. PNAS 2004 Nov; 101(48):16762.

• <u>The human Rad9 checkpoint protein stimulates the carbamoyl phosphate synthetase activity of the</u> <u>multifunctional protein CAD.</u>

Lindsey-Boltz LA, Wauson EM, Graves LM, Sancar A. Nucleic Acids Research 2004 Aug; 32(15):4524.

#### Disease

- Ataxia telangiectasia
- <u>Cardiovascular Diseases</u>
- <u>Colorectal Neoplasms</u>
- Diabetes Mellitus
- Edema
- Kidney Failure