

## Rabbit anti-Human RAD9 Polyclonal Antibody | anti-RAD9 antibody

Phospho-RAD9 (Ser272) Antibody

|                               |                       |                            |                                            |
|-------------------------------|-----------------------|----------------------------|--------------------------------------------|
| CATALOG #<br><b>AAA329626</b> | HOST<br><b>Rabbit</b> | REACTIVITY<br><b>Human</b> | APPLICATIONS<br><b>ELISA, Western Blot</b> |
|-------------------------------|-----------------------|----------------------------|--------------------------------------------|

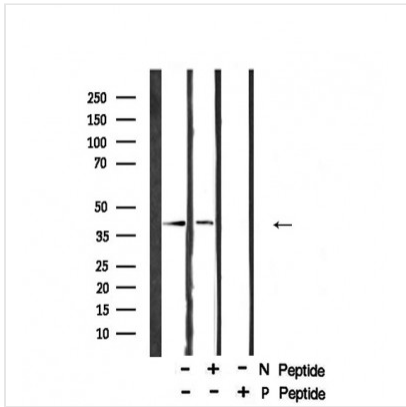
### PRODUCT SYNONYMS

RAD9; Polyclonal Antibody; Phospho-RAD9 (Ser272) Antibody; Cell cycle checkpoint control protein; Cell cycle checkpoint control protein RAD9A; DNA repair exonuclease rad9 homolog A; hRAD 9; hRAD9; Rad 9; RAD 9A; RAD9 (S pombe) homolog; RAD9 homolog A; RAD9 homolog; Rad9a; RAD9A\_HUMAN; anti-RAD9 antibody

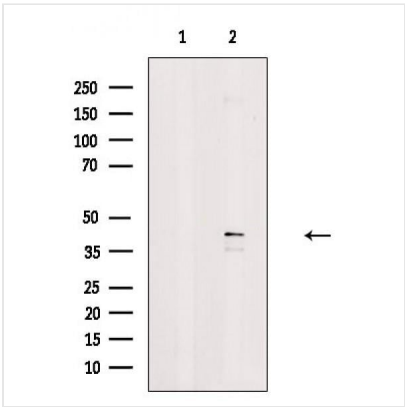
### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                                                                                                                                                                                                                                          |
| Reactivity                                     | Human                                                                                                                                                                                                                                                                                                                                                           |
| Clonality                                      | Polyclonal                                                                                                                                                                                                                                                                                                                                                      |
| Isotype                                        | Rabbit IgG                                                                                                                                                                                                                                                                                                                                                      |
| Specificity                                    | Phospho-RAD9 (Ser272) Antibody detects endogenous levels of RAD9 only when phosphorylated at Ser272.                                                                                                                                                                                                                                                            |
| Purity/Purification                            | The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.                                                                                                                                                                                                  |
| Form/Format                                    | Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                                                                                                                                                        |
| Concentration                                  | 1mg/ml (varies by lot)                                                                                                                                                                                                                                                                                                                                          |
| Applicable Applications for anti-RAD9 antibody | ELISA (Peptide ELISA), WB (Western Blot)                                                                                                                                                                                                                                                                                                                        |
| Immunogen                                      | A synthesized peptide derived from human RAD9 around the phosphorylation site of Ser272.                                                                                                                                                                                                                                                                        |
| Conjugation                                    | Unconjugated                                                                                                                                                                                                                                                                                                                                                    |
| Fragment                                       | Fab fragment                                                                                                                                                                                                                                                                                                                                                    |
| Post Translational Modifications               | Constitutively phosphorylated on serine and threonine amino acids in absence of DNA damage. Hyperphosphorylated by PRKCD and ABL1 upon DNA damage. Its phosphorylation by PRKCD may be required for the formation of the 9-1-1 complex.                                                                                                                         |
| Subunit Structure                              | Component of the toroidal 9-1-1 (RAD9-RAD1-HUS1) complex, composed of RAD9A, RAD1 and HUS1. The 9-1-1 complex associates with LIG1, POLB, FEN1, RAD17, HDAC1, RPA1 and RPA2. The 9-1-1 complex associates with the RAD17-RFC complex. RAD9A interacts with BCL2L1, FEN1, PRKCD, RAD9B, HUS1, RAD1, ABL1, RPA1, ATAD5 and RPA2. Interacts with DNAJC7 and RHNO1. |
| Similarity                                     | Belongs to the rad9 family.                                                                                                                                                                                                                                                                                                                                     |
| Subcellular Location                           | Nucleus.                                                                                                                                                                                                                                                                                                                                                        |
| Preparation and Storage                        | Store at -20 degree C. Stable for 12 months from date of receipt.                                                                                                                                                                                                                                                                                               |

IMAGES



**WB (Western Blot)**  
Western blot analysis of RAD9 (Phospho-Ser272) using H2O2 treated K562 whole cell lysates. -/+ means absence or presence of N peptide/non-phospho peptide) and P peptide(phospho peptide).



**WB (Western Blot)**  
Western blot analysis of extracts from Raji cells (serum starvation treatment), using Phospho-RAD9 (Ser272) Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-RAD9 antibody | Component of the 9-1-1 cell-cycle checkpoint response complex that plays a major role in DNA repair. The 9-1-1 complex is recruited to DNA lesion upon damage by the RAD17-replication factor C (RFC) clamp loader complex. Acts then as a sliding clamp platform on DNA for several proteins involved in long-patch base excision repair (LP-BER). The 9-1-1 complex stimulates DNA polymerase beta (POLB) activity by increasing its affinity for the 3'-OH end of the primer-template and stabilizes POLB to those sites where LP-BER proceeds; endonuclease FEN1 cleavage activity on substrates with double, nick, or gap flaps of distinct sequences and lengths; and DNA ligase I (LIG1) on long-patch base excision repair substrates. The 9-1-1 complex is necessary for the recruitment of RHNO1 to sites of double-stranded breaks (DSB) occurring during the S phase. RAD9A possesses 3'->5' double stranded DNA exonuclease activity. Its phosphorylation by PRKCD may be required for the formation of the 9-1-1 complex. |
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NCBI AND UNIPROT INFORMATION

|                                  |                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------|
| NCBI GI #                        | 74717382                                                                                  |
| NCBI GeneID                      | 5883                                                                                      |
| UniProt Accession #              | Q99638; Q6FI29; Q96C41; B2RCZ8                                                            |
| Molecular Weight                 | 391                                                                                       |
| NCBI Official Full Name          | Cell cycle checkpoint control protein RAD9A                                               |
| NCBI Official Synonym Full Names | RAD9 homolog A (S. pombe)                                                                 |
| NCBI Official Symbol             | RAD9A                                                                                     |
| NCBI Official Synonym Symbols    | RAD9                                                                                      |
| NCBI Protein Information         | cell cycle checkpoint control protein RAD9A; hRAD9; DNA repair exonuclease rad9 homolog A |
| UniProt Protein Name             | Cell cycle checkpoint control protein RAD9A                                               |
| UniProt Gene Name                | <b>RAD9A</b>                                                                              |
| UniProt Synonym Gene Names       | hRAD9                                                                                     |
| UniProt Entry Name               | RAD9A_HUMAN                                                                               |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.