

Rabbit RAD9A Polyclonal Antibody | anti-RAD9A antibody

RAD9A Antibody

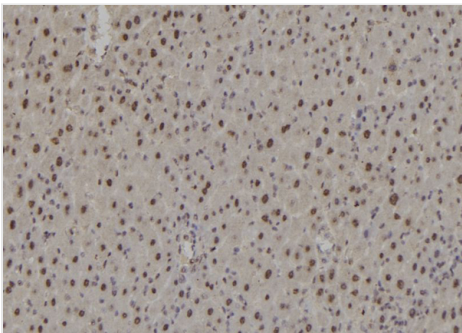
CATALOG # AAA326443	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

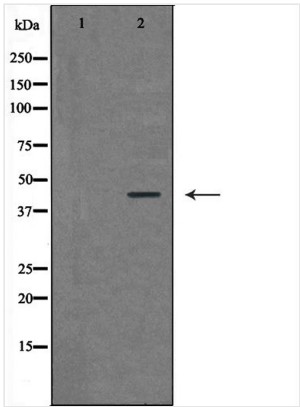
RAD9A; Polyclonal Antibody; RAD9A Antibody; Cell cycle checkpoint control protein; Cell cycle checkpoint control protein RAD9A; DNA repair exonuclease rad9 homolog A; hRAD 9; hRAD9; Rad 9; RAD 9A; RAD9 (S pombe) homolog; RAD9 homolog A; RAD9 homolog; Rad9a; RAD9A_HUMAN; anti-RAD9A antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	RAD9A antibody detects endogenous levels of total RAD9A
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	315
Applicable Applications for anti-RAD9A antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human RAD9A
Subcellular Location	Nucleus.
Predicted Cross Reactivity	Pig, Zebrafish, Horse, Sheep, Rabbit, Dog
Similarity	Pig (100%), Zebrafish (86%), Horse (91%), Sheep (100%), Rabbit (82%), Dog (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA326443 at 1/100 staining Rat liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of extracts of HeLa, using RAD9A antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-RAD9A antibody

Description: This gene product is highly similar to Schizosaccharomyces pombe rad9, a cell cycle checkpoint protein required for cell cycle arrest and DNA damage repair. This protein possesses 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 complex is recruited by checkpoint protein RAD17 to the sites of DNA damage, which is thought to be important for triggering the checkpoint-signaling cascade. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2011]

Function: 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.

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.

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.

Similarity: Belongs to the rad9 family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	342672046
NCBI GeneID	5883
NCBI Accession #	NP_001230153.1
NCBI GenBank Nucleotide #	NM_001243224.1
UniProt Accession #	Q99638; Q6FI29; Q96C41; B2RCZ8
Molecular Weight	Observed: 42 kDa Predicted: 43 kDa
NCBI Official Full Name	cell cycle checkpoint control protein RAD9A isoform 2

NCBI Official Synonym Full Names	RAD9 checkpoint clamp component A
NCBI Official Symbol	RAD9A
NCBI Official Synonym Symbols	RAD9
NCBI Protein Information	cell cycle checkpoint control protein RAD9A
UniProt Protein Name	Cell cycle checkpoint control protein RAD9A
UniProt Gene Name	RAD9A
UniProt Synonym Gene Names	hRAD9

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/rad9a-antibody-immunohistochemistry-western-blot-elisa/326443>