Anti-Rad9 antibody

Description	Rabbit polyclonal to Rad9.

Model	STJ95337
Host	Rabbit
Reactivity	Human
Applications	ELISA, IHC
Immunogen	Synthesized peptide derived from human Rad9 around the non-phosphorylation site of S272.
Immunogen Region	210-290 aa
Gene Symbol	RAD9A
Dilution range	IHC 1:100-1:300ELISA 1:5000
Specificity	Rad9 Polyclonal Antibody detects endogenous levels of Rad9 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Cell cycle checkpoint control protein RAD9A hRAD9 DNA repair exonuclease rad9 homolog A
Molecular Weight	42.547 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG

Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Alternative Names	Cell cycle checkpoint control protein RAD9A hRAD9 DNA repair exonuclease rad9 homolog A
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.
Cellular Localization	Nucleus
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.