



Rad9 Polyclonal Antibody

Catalog No	YP-Ab-00517
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	IHC;IF;ELISA
Gene Name	RAD9A
Protein Name	Cell cycle checkpoint control protein RAD9A
Immunogen	The antiserum was produced against synthesized peptide derived from human RAD9. AA range:257-306
Specificity	Rad9 Polyclonal Antibody detects endogenous levels of Rad9 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	RAD9A; Cell cycle checkpoint control protein RAD9A; hRAD9; DNA repair exonuclease rad9 homolog A
Observed Band	
Cell Pathway	
Tissue Specificity	
Function	catalytic activity:Exonucleolytic cleavage in the 3'- to 5'-direction to yield nucleoside 5'-phosphates.,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. RAD9A possesses 3'->5' double stranded DNA exonuclease activity. It



Background

catalytic activity: Exonucleolytic cleavage in the 3'- to 5'-direction to yield nucleoside 5'-phosphates. 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. 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. PTM: 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. subunit: 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.

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 30min).