

Rad9 rabbit pAb

Cat No.: ES6966

For research use only

Overview

Product Name Rad9 rabbit pAb

Host species Rabbit

Applications IHC;IF;ELISA

Species Cross-Reactivity Human; Rat; Mouse;

Recommended dilutions Immunohistochemistry: 1/100 - 1/300. ELISA:

1/5000. Not yet tested in other applications.

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.

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name Cell cycle checkpoint control protein RAD9A

Gene Name RAD9A

Cellular localization

Purification The antibody was affinity-purified from rabbit

antiserum by affinity-chromatography using

epitope-specific immunogen.

Clonality Polyclonal Concentration 1 mg/ml

Observed band

Human Gene ID 5883 Human Swiss-Prot Number Q96C41

Alternative Names RAD9A; Cell cycle checkpoint control protein RAD9A;

hRAD9; DNA repair exonuclease rad9 homolog A

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



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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.,



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).

