



RAD1 Polyclonal Antibody

Catalog No	YP-Ab-10868
Isotype	IgG
Reactivity	Human; Mouse
Applications	IHC;IF;WB
Gene Name	RAD1 REC1
Immunogen	Synthesized peptide derived from human RAD1
Specificity	This antibody detects endogenous levels of human RAD1
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 serum by affinity-chromatography using specific immunogen.
Dilution	IHC-p 1:50-200, WB 1:500-2000. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	REC1;Rad1-like DNA damage checkpoint protein;HRAD1;RAD1;RAD1 REC1; Cell cycle checkpoint protein RAD1 (hRAD1;EC 3.1.11.2;DNA repair exonuclease rad1 homolog;Rad1-like DNA damage checkpoint protein)
Observed Band	32kD
Calculated Molecular Weight	32kD
Cell Pathway	Nucleus .
Tissue Specificity	Expressed in testis, uterus, bladder, spleen, ovaries, lung, brain and muscle (at protein level).
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. Isoform 1 possesses 3'→5' double stranded DNA exonuclease activity

Background

This gene encodes a component of a heterotrimeric cell cycle checkpoint complex, known as the 9-1-1 complex, that is activated to stop cell cycle progression in response to DNA damage or incomplete DNA replication. The 9-1-1 complex is recruited by RAD17 to affected sites where it may attract specialized DNA polymerases and other DNA repair effectors. Alternatively spliced transcript variants of this gene have been described. [provided by RefSeq, Jan 2009],

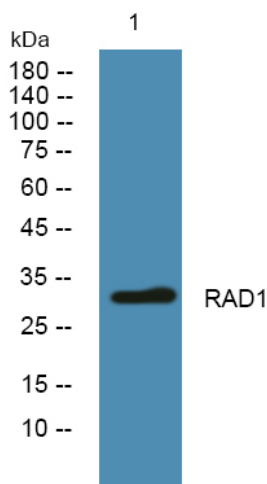
matters needing attention

Avoid repeated freezing and thawing!

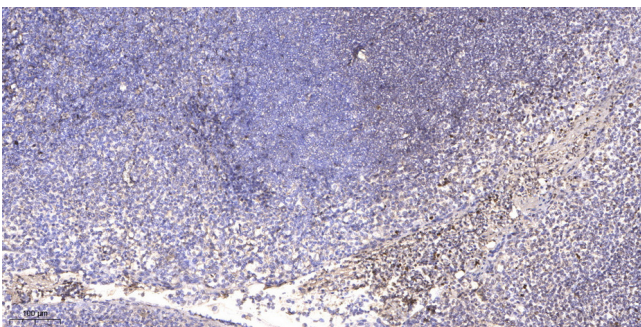
Usage suggestions

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

Products Images



Western blot analysis of lysates from PC12 cells, primary antibody was diluted at 1:1000, 4° over night



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200 (4° overnight). 2, Tris-EDTA, pH 9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200 (room temperature, 45 min).