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Anti-RAD1 Antibody

Rabbit polyclonal antibody to RAD1
Catalog # AP59932

Product Information

Application	WB
Primary Accession	O60671
Other Accession	Q9QWZ1
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31827

Additional Information

Gene ID	5810
Other Names	REC1; Cell cycle checkpoint protein RAD1; hRAD1; DNA repair exonuclease rad1 homolog; Rad1-like DNA damage checkpoint protein
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RAD1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	RAD1
Synonyms	REC1
Function	Component of the 9-1-1 cell-cycle checkpoint response complex that plays a major role in DNA repair (PubMed:10846170, PubMed:10884395). The 9-1-1 complex is recruited to DNA lesion upon damage by the RAD17-replication factor C (RFC) clamp loader complex (PubMed:12578958). Acts then as a sliding clamp platform on DNA for several proteins involved in long-patch base excision repair (LP-BER) (PubMed:15871698). 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 (PubMed:15314187,

PubMed:15556996, PubMed:15871698). The 9-1-1 complex is necessary for the recruitment of RHNO1 to sites of double-stranded breaks (DSB) occurring during the S phase (PubMed:21659603).

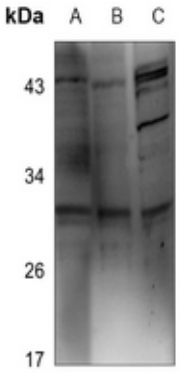
Cellular Location Nucleus.

Tissue Location Expressed in testis, uterus, bladder, spleen, ovaries, lung, brain and muscle (at protein level)

Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RAD1. The exact sequence is proprietary.

Images



Western blot analysis of RAD1 expression in SHSY5Y (A), BV2 (B), H9C2 (C) whole cell lysates.