10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-RAD1 Antibody

Catalog # AP59932

Product Information

Application	WB
Primary Accession	O60671
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 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

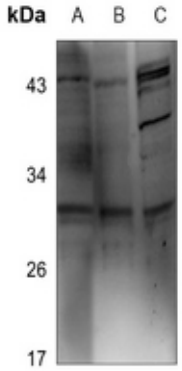
Name	RAD1
Synonyms	REC1
Function	Component of the 9-1-1 cell-cycle checkpoint response complex that plays a major role in DNA repair (PubMed:10846170, PubMed:10884395). The 9-1-1 complex is recruited to DNA lesion upon damage by the RAD17-replication factor C (RFC) clamp loader complex (PubMed:12578958). 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)

Images



Western blot analysis of RAD1 expression in SHSY5Y (A), BV2 (B), H9C2 (C) whole cell lysates. (Predicted band size: 31 kD; Observed band size: 32 kD)

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