

Rad1 antibody (pAb)

Catalog No: 40978**RRID:** AB_2793468**Application(s):** WB**Reactivity:** Human**Quantity:** 100 µg**Purification:** Affinity Purified**Host:** Rabbit**Isotype:** IgG**Concentration:** 0.5 µg/µl**Molecular Weight:** 66 kDa

Background: Rad1 (REC1) is a 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. Rad1 then acts 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. Rad1 isoform 1 possesses 3' -5' double-stranded DNA exonuclease activity.

Immunogen: This Rad1 antibody was raised against a synthetic peptide corresponding to amino acid residues 133-148 of human Rad1.

Buffer: PBS containing 0.02% sodium azide. Sodium azide is highly toxic.

Application Notes:

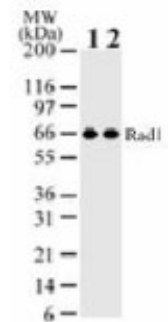
Applications Validated by Active Motif:

WB: 1 - 2 µg/ml dilution

For optimal results, primary antibody incubations should be performed at room temperature. The addition of 0.1% Tween 20 to all blocking solutions may also reduce background. Individual optimization may be required.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Store at 4°C for short term. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

**Rad1 pAb tested by Western blot.**

Rad1 detection by Western blot. hRad1 rabbit pAb was diluted at 2 µg/ml (lane 1) and 1 µg/ml (lane 2) and tested against 10 µg of 293 nuclear extract by Western blot. A single band at 66 kDa is detected.