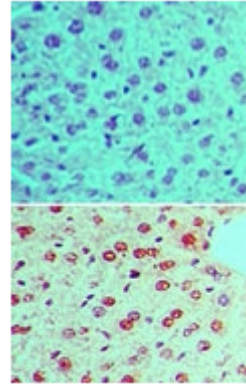


Polyclonal Antibody to RAD17 pSer645 - Aff - Purified

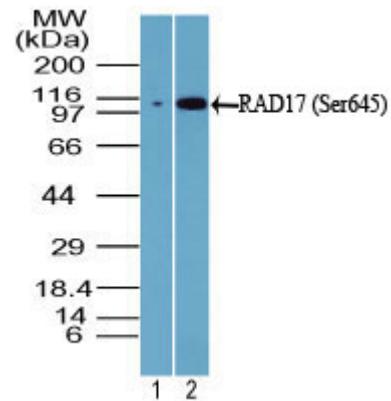
Alternate names:	Cell cycle checkpoint protein RAD17, R24L, RF-C/activator 1 homolog
Catalog No.:	AP22130PU-S
Quantity:	20 µg
Concentration:	0.2 mg/ml
Background:	Rad17, also known as 'cell cycle checkpoint protein RAD17,' is a nuclear protein belonging to the Rad17/RAD24 family and necessary for sustained cell growth, maintenance of chromosomal stability, and ATR-dependent checkpoint activation upon DNA damage. Rad17 is known to have a weak ATPase activity and is required for binding to chromatin and also participates in the recruitment of the RAD1-RAD9-HUS1 complex onto chromatin, and in CHEK1 activation. It may also serve as a sensor of DNA replication progression, and may be involved in homologous recombination. Rad17 is a part of a DNA-binding complex containing RFC2, RFC3, RFC4 and RFC5. Four isoforms have been reported by X-ray irradiation. Overexpression of this protein is seen in various cancer cell lines and in colon carcinoma.
Uniprot ID:	O75943
NCBI:	NP_002864.1
GenID:	5884
Host:	Rabbit
Immunogen:	Human Rad17 protein containing a phosphorylated serine residue at position 645 Remarks: The amino acid sequence used as immunogen is 100% homologous in human (isoforms CRA_a, CRA_f and CRA_d), rhesus monkey, chimpanzee and orangutan, 92% homologous in horse, cow and mouse and 85% homologous in dog and rat.
Format:	State: Liquid Ig fraction Purification: Antigen affinity chromatography Buffer System: PBS containing 0.05% BSA and 0.05% sodium azide
Applications:	Immunohistochemistry on paraffin sections: 5 µg/ml. Western blot: 0.025-1 µg/ml. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody detects RAD17 pSer645.
Species Reactivity:	Tested: Chimpanzee, Human, Mouse, Orangutan, Rhesus Monkey Expected from sequence similarity: Cow, Dog, Horse, Rat
Storage:	Store at 2 - 8 °C for up to three months or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

- General Readings:**
1. Bao, S. et al. Cancer Res. 59:2023-2028 (1999).
 2. Parker, AE. et al. J. Biol. Chem. 273:18340-18346 (1998). Note: Erratum: J. Biol. Chem. 274:24438-24439 (1999).
 3. Bao, S. et al. Nature. 411:969-974 (2001).

Pictures: Immunohistochemical analysis of phosphorylated Rad17 in formalin-fixed, paraffin-embedded mouse liver tissue using an isotype control (top) and AP22130PU-S (bottom) at 5 µg/ml.



Western blot analysis of phosphorylated Rad17 (Ser645) in 1) untreated PANC-1 cells (a human pancreatic carcinoma) and 2) UV-treated PANC-1 cells using AP22130PU-S at 0.5 µg/ml.



Western blot analysis of phosphorylated Rad17 (Ser645) in recombinant fusion protein containing 1) a phosphorylated serine at position 645 and 2) an unphosphorylated serine at position 645 using AP22130PU-S at 0.025 µg/ml.

