

Rad17 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10353**Specification**

Rad17 Antibody - Product Information

Application	WB
Primary Accession	O75943
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	77055

Rad17 Antibody - Additional Information**Gene ID 5884**

Application & Usage	Western blotting (0.5-4 µg/ml). However, the optimal concentrations should be determined individually. The antibody recognizes the mature forms of Rad17 (~55 kDa and ~45 kDa) of human, mouse and rat origins. Reactivity to other species has not been tested.
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Other Names

CCYC, R24L, RAD24, HRAD17, RAD17SP, FLJ41520, RAD17

Target/Specificity

Rad17

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

Rad17 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Rad17 Antibody - Protein Information

Name RAD17 {ECO:0000303|PubMed:9878245, ECO:0000312|HGNC:HGNC:9807}

Function

Essential for sustained cell growth, maintenance of chromosomal stability, and ATR-dependent checkpoint activation upon DNA damage (PubMed:10208430, PubMed:11418864, PubMed:11687627, PubMed:11799063, PubMed:12672690, PubMed:14624239, PubMed:15235112). Has a weak ATPase activity required for binding to chromatin (PubMed:10208430, PubMed:11418864, PubMed:11687627, PubMed:11799063, PubMed:12672690, PubMed:14624239, PubMed:15235112). Participates in the recruitment of the 9-1-1 (RAD1-RAD9-HUS1) complex and RHNO1 onto chromatin, and in CHEK1 activation (PubMed:21659603). May also serve as a sensor of DNA replication progression, and may be involved in homologous recombination (PubMed:14500819, PubMed:12578958, PubMed:15538388).

Cellular Location

Nucleus. Note=Phosphorylated form redistributes to discrete nuclear foci upon DNA damage.

Tissue Location

Overexpressed in various cancer cell lines and in colon carcinoma (at protein level). Isoform 2 and isoform 3 are the most abundant isoforms in non irradiated cells (at protein level) Ubiquitous at low levels. Highly expressed in testis, where it is expressed within the germinal epithelium of the seminiferous tubuli Weakly expressed in seminomas (testicular tumors)

Rad17 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Rad17 Antibody - Images**Rad17 Antibody - Background**

Rad17 is an essential component of cell cycle checkpoints activated by DNA damage and disruption of DNA replication. DNA lesions such as single- and double-strand breaks, inter- and intra-strand cross-links, and base modifications hamper transcription and replication, resulting in cell cycle arrest, apoptosis, and mutagenesis. Phosphorylation of Rad17 at Ser635 and Ser645 is a critical early event during checkpoint signaling in DNA damaged cells.