

Rad17 (phospho Ser645) Polyclonal Antibody
Catalog # AP67223**Specification****Rad17 (phospho Ser645) Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	O75943
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal

Rad17 (phospho Ser645) Polyclonal Antibody - Additional Information**Gene ID** 5884**Other Names**

RAD17; R24L; Cell cycle checkpoint protein RAD17; hRad17; RF-C/activator 1 homolog

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Rad17 (phospho Ser645) Polyclonal 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). Involved in homologous recombination by mediating recruitment of the MRN complex to DNA damage sites (PubMed:24534091). May also serve as a sensor of DNA replication progression (PubMed:12578958, PubMed:14500819, PubMed:15538388).

Cellular Location

Nucleus. Chromosome Note=Phosphorylated form redistributes to discrete nuclear foci upon DNA damage (PubMed:11799063). Localizes to DNA double-strand breaks (DSBs) (PubMed:24534091).

Tissue Location

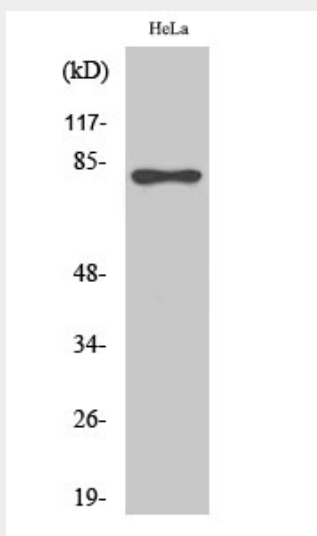
Overexpressed in various cancer cell lines and in colon carcinoma (at protein level). Isoform 2 and isoform 3 are the most abundant isoforms in non irradiated cells (at protein level) Ubiquitous at low levels. Highly expressed in testis, where it is expressed within the germinal epithelium of the seminiferous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

Rad17 (phospho Ser645) Polyclonal 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 (phospho Ser645) Polyclonal Antibody - Images



Western Blot analysis of various cells using Phospho-Rad17 (S645) Polyclonal Antibody

Rad17 (phospho Ser645) Polyclonal Antibody - Background

Essential for sustained cell growth, maintenance of chromosomal stability, and ATR-dependent checkpoint activation upon DNA damage. Has a weak ATPase activity required for binding to chromatin. Participates in the recruitment of the RAD1-RAD9- HUS1 complex and RHNO1 onto chromatin, and in CHEK1 activation. May also serve as a sensor of DNA replication progression, and may be involved in homologous recombination.