

### **Anti-RAD17 Antibody**

Rabbit polyclonal antibody to RAD17 Catalog # AP60378

### **Specification**

## **Anti-RAD17 Antibody - Product Information**

Application WB, IF/IC, IHC
Primary Accession O75943
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 77055

## **Anti-RAD17 Antibody - Additional Information**

### **Gene ID 5884**

#### **Other Names**

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

## Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human RAD17. The exact sequence is proprietary.

# **Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~1:100~500

#### **Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

# **Storage**

Store at -20 °C. Stable for 12 months from date of receipt

## **Anti-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:<a

href="http://www.uniprot.org/citations/10208430" target="\_blank">10208430</a>, PubMed:<a href="http://www.uniprot.org/citations/11418864" target="\_blank">11418864</a>, PubMed:<a href="http://www.uniprot.org/citations/11687627" target="\_blank">11687627</a>, PubMed:<a href="http://www.uniprot.org/citations/11799063" target="\_blank">11799063</a>, PubMed:<a href="http://www.uniprot.org/citations/12672690" target="\_blank">12672690</a>, PubMed:<a



href="http://www.uniprot.org/citations/14624239" target="\_blank">14624239</a>, PubMed:<a href="http://www.uniprot.org/citations/15235112" target="\_blank">15235112</a>). Has a weak ATPase activity required for binding to chromatin (PubMed:<a href="http://www.uniprot.org/citations/10208430" target="\_blank">10208430</a>, PubMed:<a href="http://www.uniprot.org/citations/11418864" target="\_blank">11418864</a>, PubMed:<a href="http://www.uniprot.org/citations/11687627" target="\_blank">11687627</a>, PubMed:<a href="http://www.uniprot.org/citations/11799063" target="\_blank">11799063</a>, PubMed:<a href="http://www.uniprot.org/citations/12672690" target="\_blank">12672690</a>, PubMed:<a href="http://www.uniprot.org/citations/14624239" target="\_blank">14624239</a>, PubMed:<a href="http://www.uniprot.org/citations/15235112" target="\_blank">15235112</a>). Participates in the recruitment of the 9-1-1 (RAD1-RAD9-HUS1) complex and RHNO1 onto chromatin, and in

CHEK1 activation (PubMed:<a href="http://www.uniprot.org/citations/21659603" target="\_blank">21659603</a>). Involved in homologous recombination by mediating recruitment of the MRN complex to DNA damage sites (PubMed:<a

href="http://www.uniprot.org/citations/24534091" target="\_blank">24534091</a>). May also serve as a sensor of DNA replication progression (PubMed:<a

href="http://www.uniprot.org/citations/12578958" target="\_blank">12578958</a>, PubMed:<a href="http://www.uniprot.org/citations/14500819" target="\_blank">14500819</a>, PubMed:<a href="http://www.uniprot.org/citations/15538388" target="\_blank">15538388</a>).

### **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)

# **Anti-RAD17 Antibody - Protocols**

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

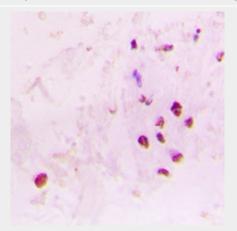
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-RAD17 Antibody - Images

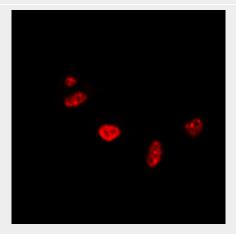




Western blot analysis of RAD17 expression in Hela (A) whole cell lysates.



Immunohistochemical analysis of RAD17 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of RAD17 staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

# **Anti-RAD17 Antibody - Background**





KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human RAD17. The exact sequence is proprietary.