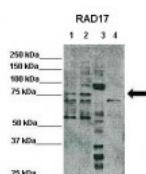




## RAD17 Antibody

CATALOG NUMBER: 27-302



Antibody used in WB on HeLa, HEK293T, Xenopus laevis egg extract, mouse embryonic at 1:500 (Lane1: 25ug HeLa lysate, Lane2: 25ug HEK293T lysate, Lane3: 25ug Xenopus laevis egg extract, Lane4: 25ug mouse embryonic stem cells lysate).



Antibody used in WB on Human Jurkat cells at 1.25 ug/ml.

### Specifications

<b>SPECIES REACTIVITY:</b>	Human
<b>TESTED APPLICATIONS:</b>	ELISA, WB
<b>APPLICATIONS:</b>	RAD17 antibody can be used for detection of RAD17 by ELISA at 1:62500. RAD17 antibody can be used for detection of RAD17 by western blot at 1.25 ug/mL, and HRP conjugated secondary antibody should be diluted 1:50,000 - 100,000.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>POSITIVE CONTROL:</b>	1) Cat. No. 1205 - Jurkat Cell Lysate
<b>PREDICTED MOLECULAR WEIGHT:</b>	66 kDa, 76 kDa, 76 kDa, 77 kDa, 57 kDa, 76 kDa, 76 kDa, 76 kDa
<b>IMMUNOGEN:</b>	Antibody produced in rabbits immunized with a synthetic peptide corresponding a region of human RAD17.
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	Antibody is purified by protein A chromatography method.
<b>PHYSICAL STATE:</b>	Lyophilized
<b>BUFFER:</b>	Antibody is lyophilized in PBS buffer with 2% sucrose. Add 50 uL of distilled water. Final antibody concentration is 1 mg/mL.
<b>CONCENTRATION:</b>	1 mg/ml
<b>STORAGE CONDITIONS:</b>	For short periods of storage (days) store at 4°C. For longer periods of storage, store RAD17 antibody at -20°C. As with any antibody avoid repeat freeze-thaw cycles.
<b>CLONALITY:</b>	Polyclonal
<b>CONJUGATE:</b>	Unconjugated

#### Additional Info

ALTERNATE NAMES:	RAD17, CCYC, HRAD17, R24L, RAD17Sp, Rad24, RAD24, RAD17SP
ACCESSION NO.:	NP_579919
PROTEIN GI NO.:	19718790
OFFICIAL SYMBOL:	RAD17
GENE ID:	5884

#### Background

**BACKGROUND:** RAD17 is highly similar to the gene product of *Schizosaccharomyces pombe* rad17, a cell cycle checkpoint gene required for cell cycle arrest and DNA damage repair in response to DNA damage. This protein shares strong similarity with DNA replication factor C (RFC), and can form a complex with RFCs. This protein binds to chromatin prior to DNA damage and is phosphorylated by ATR after the damage. This protein recruits the RAD1-RAD9-HUS1 checkpoint protein complex onto chromatin after DNA damage, which may be required for its phosphorylation. The protein encoded by this gene is highly similar to the gene product of *Schizosaccharomyces pombe* rad17, a cell cycle checkpoint gene required for cell cycle arrest and DNA damage repair in response to DNA damage. This protein shares strong similarity with DNA replication factor C (RFC), and can form a complex with RFCs. This protein binds to chromatin prior to DNA damage and is phosphorylated by ATR after the damage. This protein recruits the RAD1-RAD9-HUS1 checkpoint protein complex onto chromatin after DNA damage, which may be required for its phosphorylation. The phosphorylation of this protein is required for the DNA-damage-induced cell cycle G2 arrest, and is thought to be a critical early event during checkpoint signaling in DNA-damaged cells. Eight alternatively spliced transcript variants of this gene, which encode four distinct proteins, have been reported.

**REFERENCES:** 1) Tsao, C.C., (2004) EMBO J. 23 (23), 4660-4669.

FOR RESEARCH USE ONLY

December 12, 2016