

Rabbit RAD17 Polyclonal Antibody | anti-RAD17 antibody

Phospho-RAD17 (Ser646) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31431	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%)	Western Blot, Immunohistochemistry, Immunofluorescence, Immunocytochemistry, ELISA

PRODUCT SYNONYMS

RAD17; Polyclonal Antibody; Phospho-RAD17 (Ser646) Antibody; CCYC; Cell cycle checkpoint protein; Cell cycle checkpoint protein RAD17; FLJ41520; HRAD 17; hRad17; R24L; Rad 17; Rad 24; RAD1 (S. pombe) homolog; RAD1 homolog; RAD17 homolog (S. pombe); RAD17 homolog; Rad17 like protein; S. pombe; homolog of; RAD17_HUMAN; RAD17Sp; Rad24; mouse; S. cerevisiae; RF C activator 1 homolog; RF C/activator 1 homolog; RF-C/activator 1 homolog; anti-RAD17 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-RAD17 (Ser646) Antibody detects endogenous levels of RAD17 only when phosphorylated at Ser646. Tissue Specificity: 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).
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-RAD17 antibody	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), ICC (Immunocytochemistry), ELISA (Peptide ELISA)
Application Notes	WB: 1:1000-3000 IF/ICC: 1:100-1:500 IHC: 1:50-1:200 Peptide ELISA: 1:20,000-1:40,000
Immunogen	A synthesized peptide derived from human RAD17 around the phosphorylation site of Ser646.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Phosphorylated. Phosphorylation on Ser-646 and Ser-656 is cell cycle-regulated, enhanced by genotoxic stress, and required for activation of checkpoint signaling. Phosphorylation is mediated by ATR upon UV or replication arrest, whereas it may be mediated both by ATR and ATM upon ionizing radiation. Phosphorylation on both sites is required for interaction with RAD1 but dispensable for interaction with RFC3 or RFC4.
Subunit Structure	Part of a DNA-binding complex containing RFC2, RFC3, RFC4 and RFC5. Interacts with RAD1 and RAD9 within the RAD1-RAD9-HUS1 complex. Interacts with RAD9B, POLE, SNU13 and MCM7. DNA damage promotes interaction with ATR or ATM and disrupts interaction with the RAD1-RAD9-HUS1 complex.
Similarity	Belongs to the rad17/RAD24 family.

Subcellular Location	Nucleus. Note: Phosphorylated form redistributes to discrete nuclear foci upon DNA damage.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



Application Data

At 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody(Red), diluted at 1/600, was used as secondary antibody.



IHC (Immunohistochemistry)

At 1/100 staining Human gastric cancer and adjacent normal tissues by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/100 staining Human ovarian cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/100 staining Mouse liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/100 staining Mouse muscle tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/100 staining Rat heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-RAD17 antibody	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.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4506383
NCBI GeneID	5884
NCBI Accession #	NP_002864.1
NCBI GenBank Nucleotide #	NM_002873.1
UniProt Accession #	O75943; O75714; Q7Z3S4; Q9UNK7; Q9UNR7; Q9UNR8; Q9UPF5; A8K8X2; D3DWA5
Molecular Weight	77,055 Da
NCBI Official Full Name	cell cycle checkpoint protein RAD17 isoform 1
NCBI Official Synonym Full Names	RAD17 homolog (S. pombe)
NCBI Official Symbol	RAD17

NCBI Official Synonym Symbols	CCYC; R24L; RAD24; HRAD17; RAD17SP
NCBI Protein Information	cell cycle checkpoint protein RAD17; RAD1 homolog; Rad17-like protein; RF-C activator 1 homolog; RF-C/activator 1 homolog
UniProt Protein Name	Cell cycle checkpoint protein RAD17
UniProt Gene Name	RAD17
UniProt Synonym Gene Names	R24L; hRad17
UniProt Entry Name	RAD17_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/rad17-antibody-western-blot-immunohistochemistry-immunofluorescence-immunocytochemistry-peptide-elisa-elisa/31431>