10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-RAD17 Rabbit Polyclonal Antibody

Rabbit polyclonal antibody
Catalog # AGI2150

Product Information

Application	WB
Primary Accession	O75943
Reactivity	Rat, Human, Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	77055
Gene Name	RAD17
Aliases	RAD17; RAD17 Checkpoint Clamp Loader Component; RAD17Sp; Rad24; CCYC; Cell Cycle Checkpoint Protein RAD17; R24L; Cell Cycle Checkpoint Protein (RAD17); RAD17 Homolog (S. Pombe); RF-C Activator 1 Homolog; RF-C/Activator 1 Homolog; RAD1 (S. Pombe) Homolog; Rad17-Like Protein; RAD17 Homolog; RAD1 Homolog; HRAD17; HRad17
Immunogen	A synthesized peptide derived from human RAD17

Additional Information

Gene ID	5884
Other Names	Cell cycle checkpoint protein RAD17, hRad17, RF-C/activator 1 homolog, RAD17 {ECO:0000303|PubMed:9878245, ECO:0000312|HGNC:HGNC:9807}

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)

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