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RAD17 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant RAD17.
Catalog # AT3544a

Product Information

Application	WB, E
Primary Accession	O75943
Other Accession	BC032304
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	2G12
Calculated MW	77055

Additional Information

Gene ID	5884
Other Names	Cell cycle checkpoint protein RAD17, hRad17, RF-C/activator 1 homolog, RAD17, R24L
Target/Specificity	RAD17 (AAH32304, 1 a.a. ~ 110 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	RAD17 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

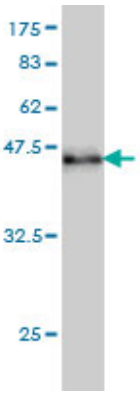
Background

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 the checkpoint kinase ATR following 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. Two pseudogenes, located on chromosomes 7 and 13, have been identified.

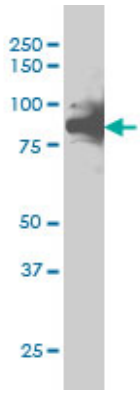
References

Proteolysis of Rad17 by Cdh1/APC regulates checkpoint termination and recovery from genotoxic stress. Zhang L, et al. EMBO J, 2010 May 19. PMID 20424596.Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.Evaluating new candidate SNPs as low penetrance risk factors in sporadic breast cancer: a two-stage Spanish case-control study. Vega A, et al. Gynecol Oncol, 2009 Jan. PMID 18950845.The human homolog of fission yeast Rad17 is implicated in tumor growth. Beretta GL, et al. Cancer Lett, 2008 Aug 8. PMID 18378394.DNA damage-induced ubiquitylation of RFC2 subunit of replication factor C complex. Tomida J, et al. J Biol Chem, 2008 Apr 4. PMID 18245774.

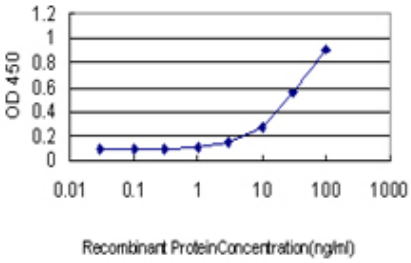
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.73 KDa) .



RAD17 monoclonal antibody (M01), clone 2G12 Western Blot analysis of RAD17 expression in Hela S3 NE ((Cat # AT3544a)



Detection limit for recombinant GST tagged RAD17 is approximately 1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.