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RAD1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant RAD1.
Catalog # AT3543a

Product Information

Application	WB, IHC, E
Primary Accession	O60671
Other Accession	BC006837
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG3 Kappa
Clone Names	1G2
Calculated MW	31827

Additional Information

Gene ID	5810
Other Names	Cell cycle checkpoint protein RAD1, hRAD1, DNA repair exonuclease rad1 homolog, Rad1-like DNA damage checkpoint protein, RAD1, REC1
Target/Specificity	RAD1 (AAH06837, 1 a.a. ~ 90 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 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	RAD1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

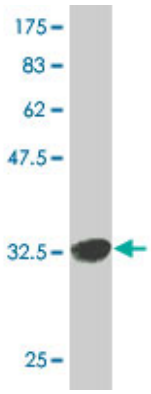
This gene encodes a component of a heterotrimeric cell cycle checkpoint complex, known as the 9-1-1 complex, that is activated to stop cell cycle progression in response to DNA damage or incomplete DNA replication. The 9-1-1 complex is recruited by RAD17 to affected sites where it may attract specialized DNA polymerases and other DNA repair effectors. Alternatively spliced transcript variants of this gene have been described.

References

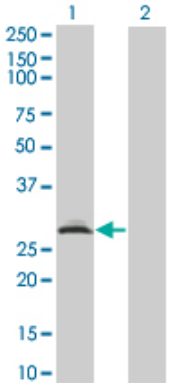
An approach based on a genome-wide association study reveals candidate loci for narcolepsy. Shimada M,

et al. Hum Genet, 2010 Oct. PMID 20677014.Interaction between human mismatch repair recognition proteins and checkpoint sensor Rad9-Rad1-Hus1. Bai H, et al. DNA Repair (Amst), 2010 May 4. PMID 20188637.Repair activities of human 8-oxoguanine DNA glycosylase are stimulated by the interaction with human checkpoint sensor Rad9-Rad1-Hus1 complex. Park MJ, et al. DNA Repair (Amst), 2009 Oct 2. PMID 19615952.Structure and functional implications of the human rad9-hus1-rad1 cell cycle checkpoint complex. Xu M, et al. J Biol Chem, 2009 Jul 31. PMID 19535328.The DNA binding domain of human DNA ligase I interacts with both nicked DNA and the DNA sliding clamps, PCNA and hRad9-hRad1-hHus1. Song W, et al. DNA Repair (Amst), 2009 Aug 6. PMID 19523882.

Images

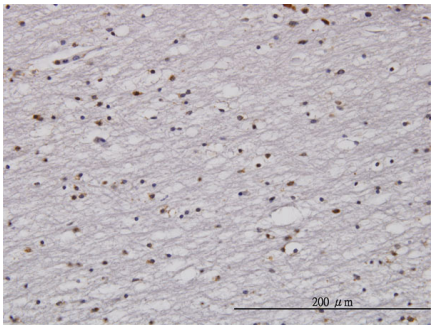


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (35.53 KDa) .

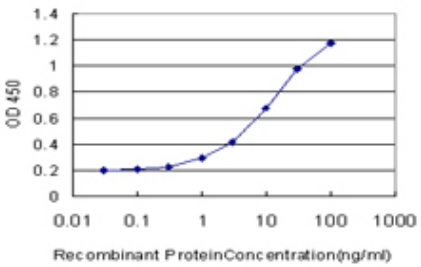


Western Blot analysis of RAD1 expression in transfected 293T cell line by RAD1 monoclonal antibody (M01), clone 1G2.

Lane 1: RAD1 transfected lysate(32.43 KDa).
Lane 2: Non-transfected lysate.

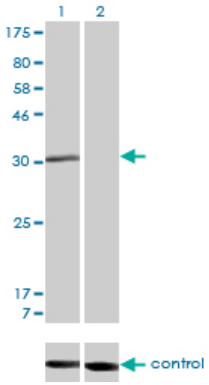


Immunoperoxidase of monoclonal antibody to RAD1 on formalin-fixed paraffin-embedded human lateral ventricle wall. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged RAD1 is approximately 0.3ng/ml as a capture antibody.

Western blot analysis of RAD1 over-expressed 293 cell



line, cotransfected with RAD1 Validated Chimera RNAi (
(Cat # AT3543a)

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