

**RAD9A Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AP52778****Specification****RAD9A Antibody - Product Information**

Application	WB, IP
Primary Accession	<a href="#">Q99638</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	55 KDa

**RAD9A Antibody - Additional Information****Gene ID** 5883**Other Names**

Cell cycle checkpoint control protein;Cell cycle checkpoint control protein RAD9A;DNA repair exonuclease rad9 homolog A;hRAD 9;hRAD9;Rad 9;RAD 9A;RAD9 (S pombe) homolog;RAD9 homolog A;RAD9 homolog;RAD9A;RAD9A\_HUMAN.

**Dilution**

WB~~1:500

IP~~1:500

**Format**

Purified mouse monoclonal in PBS(pH 7.4)containing with 0.09% (W/V) sodium azide,50% glycerol.

**Storage**

Store at -20 °C.Stable for 12 months from date of receipt

**RAD9A Antibody - Protein Information****Name** RAD9A**Function**

Component of the 9-1-1 cell-cycle checkpoint response complex that plays a major role in DNA repair (PubMed:<a href="http://www.uniprot.org/citations/10713044" target="\_blank">10713044</a>, PubMed:<a href="http://www.uniprot.org/citations/17575048" target="\_blank">17575048</a>, PubMed:<a href="http://www.uniprot.org/citations/20545769" target="\_blank">20545769</a>, PubMed:<a href="http://www.uniprot.org/citations/21659603" target="\_blank">21659603</a>, PubMed:<a href="http://www.uniprot.org/citations/31135337" target="\_blank">31135337</a>). The 9-1-1 complex is recruited to DNA lesion upon damage by the RAD17- replication factor C (RFC) clamp loader complex (PubMed:<a href="http://www.uniprot.org/citations/21659603" target="\_blank">21659603</a>). Acts then as a sliding clamp platform on DNA for several proteins involved in long-patch base excision repair

(LP-BER) (PubMed:<a href="http://www.uniprot.org/citations/21659603" target="\_blank">21659603</a>). The 9-1-1 complex stimulates DNA polymerase beta (POLB) activity by increasing its affinity for the 3'-OH end of the primer-template and stabilizes POLB to those sites where LP-BER proceeds; endonuclease FEN1 cleavage activity on substrates with double, nick, or gap flaps of distinct sequences and lengths; and DNA ligase I (LIG1) on long-patch base excision repair substrates (PubMed:<a href="http://www.uniprot.org/citations/21659603" target="\_blank">21659603</a>). The 9-1-1 complex is necessary for the recruitment of RHNO1 to sites of double-stranded breaks (DSB) occurring during the S phase (PubMed:<a href="http://www.uniprot.org/citations/21659603" target="\_blank">21659603</a>). RAD9A possesses 3'→5' double stranded DNA exonuclease activity (PubMed:<a href="http://www.uniprot.org/citations/10713044" target="\_blank">10713044</a>).

#### Cellular Location

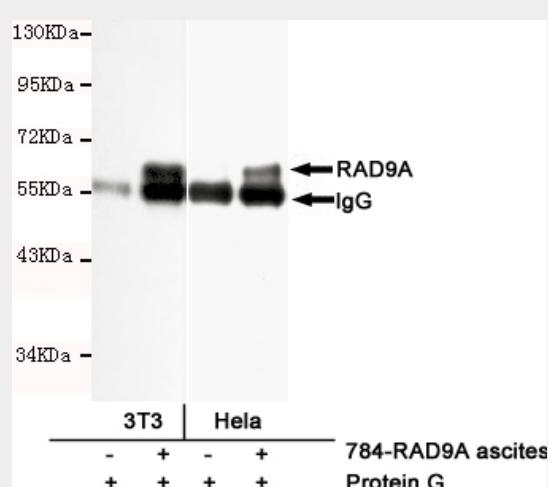
Nucleus.

#### RAD9A Antibody - Protocols

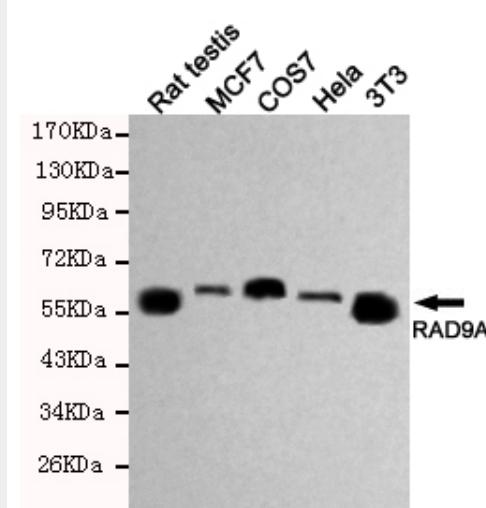
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### RAD9A Antibody - Images



Immunoprecipitation analysis of HeLa and 3T3 cell lysates using RAD9A mouse mAb.



Western blot detection of RAD9A in Hela,MCF7,3T3,COS7 and Rat testis cell lysates using RAD9A mouse mAb (1:500 diluted).Predicted band size:43KDa.Observed band size:55KDa.

#### RAD9A Antibody - Background

Component of the 9-1-1 cell-cycle checkpoint response complex that plays a major role in DNA repair. The 9-1-1 complex is recruited to DNA lesion upon damage by the RAD17-replication factor C (RFC) clamp loader complex. Acts then as a sliding clamp platform on DNA for several proteins involved in long-patch base excision repair (LP-BER). The 9-1-1 complex stimulates DNA polymerase beta (POLB) activity by increasing its affinity for the 3'-OH end of the primer-template and stabilizes POLB to those sites where LP-BER proceeds; endonuclease FEN1 cleavage activity on substrates with double, nick, or gap flaps of distinct sequences and lengths; and DNA ligase I (LIG1) on long-patch base excision repair substrates. The 9-1-1 complex is necessary for the recruitment of RHNO1 to sites of double-stranded breaks (DSB) occurring during the S phase. RAD9A possesses 3'→5' double stranded DNA exonuclease activity. Its phosphorylation by PRKCD may be required for the formation of the 9-1-1 complex.

#### RAD9A Antibody - References

- Lieberman H.B.,et al.Proc. Natl. Acad. Sci. U.S.A. 93:13890-13895(1996).  
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.  
Roos-Mattjus P.,et al.J. Biol. Chem. 278:24428-24437(2003).