

## Mouse Rad9a Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21265b

## **Specification**

## Mouse Rad9a Antibody (C-term) - Product Information

Application WB,E
Primary Accession O9Z0F6

Reactivity Human, Mouse

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 42059

## Mouse Rad9a Antibody (C-term) - Additional Information

#### **Gene ID 19367**

#### **Other Names**

Cell cycle checkpoint control protein RAD9A, mRAD9, DNA repair exonuclease rad9 homolog A, Rad9-like protein, Rad9a, Rad9

# **Target/Specificity**

This Mouse Rad9a antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 279-313 amino acids from the C-terminal region of Mouse Rad9a.

#### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Mouse Rad9a Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Mouse Rad9a Antibody (C-term) - Protein Information

## Name Rad9a

#### Synonyms Rad9



**Function** 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.

#### **Cellular Location**

Nucleus {ECO:0000250|UniProtKB:Q99638}.

#### Tissue Location

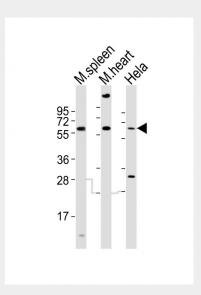
Expressed in heart, brain, spleen, lung, liver, skeletal muscle, kidney and testis.

## Mouse Rad9a Antibody (C-term) - Protocols

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

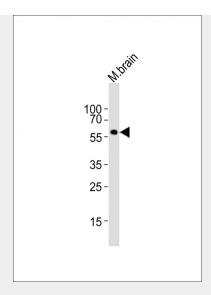
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Mouse Rad9a Antibody (C-term) - Images



All lanes : Anti-Rad9a Antibody (C-term) at 1:2000 dilution Lane 1: mouse spleen lysates Lane 2: mouse heart lysates Lane 3: Hela whole cell lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 42 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Anti-Rad9a Antibody (C-term)at 1:1000 dilution + mouse brain lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 42 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# Mouse Rad9a Antibody (C-term) - 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 (By similarity).

## Mouse Rad9a Antibody (C-term) - References

Hang H.,et al.J. Cell. Physiol. 177:241-247(1998). Carninci P.,et al.Science 309:1559-1563(2005). Park Y.-G.,et al.Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases. Ishii H.,et al.Proc. Natl. Acad. Sci. U.S.A. 102:9655-9660(2005). Sweet S.M.,et al.Mol. Cell. Proteomics 8:904-912(2009).