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Mouse Rad9a Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21218a

Product Information

Application	WB, E
Primary Accession	Q9Z0F6
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB52362
Calculated MW	42059

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 29-62 amino acids from the N-terminal region of mouse Rad9a.
Dilution	WB~~1:2000 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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

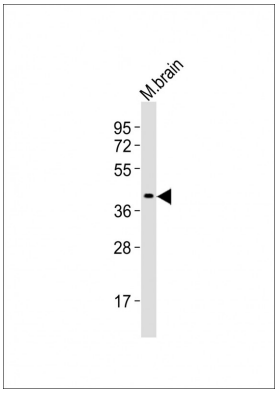
Background

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).

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).

Images



Anti-Rad9a Antibody (N-term) at 1:2000 dilution + M. brain tissue lysates Lysates/proteins at 20 µg 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.

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