

Mouse Rad9a Blocking Peptide (N-term)
Synthetic peptide
Catalog # BP21218a**Specification**

Mouse Rad9a Blocking Peptide (N-term) - Product InformationPrimary Accession [Q9Z0F6](#)**Mouse Rad9a Blocking Peptide (N-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

The synthetic peptide sequence is selected from aa 29-42 of HUMAN Rad9a

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse Rad9a Blocking Peptide (N-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 Blocking Peptide (N-term) - Protocols

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

- [Blocking Peptides](#)

Mouse Rad9a Blocking Peptide (N-term) - Images**Mouse Rad9a Blocking Peptide (N-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 RHN01 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 Blocking Peptide (N-term) - References

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