

Mouse Rad50 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP19224b**Specification**

Mouse Rad50 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P70388](#)**Mouse Rad50 Antibody (C-term) Blocking Peptide - Additional Information****Other Names**

DNA repair protein RAD50, mRad50, 36--, Rad50

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 Rad50 Antibody (C-term) Blocking Peptide - Protein Information**Name** Rad50**Function**

Component of the MRN complex, which plays a central role in double-strand break (DSB) repair, DNA recombination, maintenance of telomere integrity and meiosis. The complex possesses single-strand endonuclease activity and double-strand-specific 3'-5' exonuclease activity, which are provided by MRE11. RAD50 may be required to bind DNA ends and hold them in close proximity. This could facilitate searches for short or long regions of sequence homology in the recombining DNA templates, and may also stimulate the activity of DNA ligases and/or restrict the nuclease activity of MRE11 to prevent nucleolytic degradation past a given point. The complex may also be required for DNA damage signaling via activation of the ATM kinase. In telomeres the MRN complex may modulate t-loop formation (By similarity).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q92878}. Chromosome, telomere {ECO:0000250|UniProtKB:Q92878}. Chromosome {ECO:0000250|UniProtKB:Q92878}.
Note=Localizes to discrete nuclear foci after treatment with genotoxic agents.
{ECO:0000250|UniProtKB:Q92878}

Tissue Location

In adult, it is expressed at very low level in most tissues, except in heart, lung and aorta. Expressed at high level in testis.

Mouse Rad50 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Mouse Rad50 Antibody (C-term) Blocking Peptide - Images

Mouse Rad50 Antibody (C-term) Blocking Peptide - Background

Component of the MRN complex, which plays a central role in double-strand break (DSB) repair, DNA recombination, maintenance of telomere integrity and meiosis. The complex possesses single-strand endonuclease activity and double-strand-specific 3'-5' exonuclease activity, which are provided by MRE11A. RAD50 may be required to bind DNA ends and hold them in close proximity. This could facilitate searches for short or long regions of sequence homology in the recombining DNA templates, and may also stimulate the activity of DNA ligases and/or restrict the nuclease activity of MRE11A to prevent nucleolytic degradation past a given point. The complex may also be required for DNA damage signaling via activation of the ATM kinase. In telomeres the MRN complex may modulate t-loop formation (By similarity).