



MRE11A blocking peptide (CDBP5763)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

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| Antigen Description | This gene encodes a nuclear protein involved in homologous recombination, telomere length maintenance, and DNA double-strand break repair. By itself, the protein has 3' to 5' exonuclease activity and endonuclease activity. The protein forms a complex with the RAD50 homolog; this complex is required for nonhomologous joining of DNA ends and possesses increased single-stranded DNA endonuclease and 3' to 5' exonuclease activities. In conjunction with a DNA ligase, this protein promotes the joining of noncomplementary ends in vitro using short homologies near the ends of the DNA fragments. This gene has a pseudogene on chromosome 3. Alternative splicing of this gene results in two transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008] |
| Conjugate | Unconjugated |
| Applications | Used as a blocking peptide in immunoblotting applications. |
| Format | Liquid |
| Concentration | 200 µg/mL |
| Size | 0.05 mg |
| Preservative | None |
| Storage | -20°C |

GENE INFORMATION

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| Gene Name | MRE11A MRE11 meiotic recombination 11 homolog A (S. cerevisiae) [Homo sapiens (human)] |
| Official Symbol | MRE11A |

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| Synonyms | MRE11A; MRE11 meiotic recombination 11 homolog A (<i>S. cerevisiae</i>); ATLD; HNGS1; MRE11; MRE11B; double-strand break repair protein MRE11A; AT-like disease; MRE11 homolog 1; MRE11 homolog A; endo/exonuclease Mre11; meiotic recombination 11 homolog 1; meiotic recombination 11 homolog A; DNA recombination and repair protein |
| Entrez Gene ID | 4361 |
| mRNA Refseq | NM_005590 |
| Protein Refseq | NP_005581 |
| UniProt ID | P49959 |
| Pathway | Assembly of the RAD50-MRE11-NBS1 complex at DNA double-strand breaks; BARD1 signaling events; BRCA1-associated genome surveillance complex (BASC); Cell Cycle; Cellular Senescence; Cellular responses to stress; Cytosolic sensors of pathogen-associated DNA; DNA Damage/Telomere Stress Induced Senescence |
| Function | 3'-5' exonuclease activity; contributes_to ATP-dependent DNA helicase activity; contributes_to DNA binding; double-stranded DNA binding; endodeoxyribonuclease activity; endonuclease activity; manganese ion binding; nuclease activity; protein C-terminus binding; protein binding; single-stranded DNA endodeoxyribonuclease activity |
