

MRE11A Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant MRE11A. Catalog # AT2901a

Product Information

Application	WB
Primary Accession	<u>P49959</u>
Other Accession	<u>BC005241</u>
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a kappa
Clone Names	1D8-A6
Calculated MW	80593

Additional Information

Gene ID	4361
Other Names	Double-strand break repair protein MRE11A, Meiotic recombination 11 homolog 1, MRE11 homolog 1, Meiotic recombination 11 homolog A, MRE11 homolog A, MRE11A, HNGS1, MRE11
Target/Specificity	MRE11A (AAH05241, 1 a.a. ~ 206 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	MRE11A Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

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.

References

Gamma-Radiation Sensitivity and Polymorphisms in RAD51L1 Modulate Glioma Risk. Liu Y, et al. Carcinogenesis, 2010 Jul 7. PMID 20610542.Variation within DNA repair pathway genes and risk of multiple sclerosis. Briggs FB, et al. Am J Epidemiol, 2010 Jul 15. PMID 20522537.Comprehensive screen of genetic variation in DNA repair pathway genes and postmenopausal breast cancer risk. Monsees GM, et al. Breast Cancer Res Treat, 2010 May 23. PMID 20496165.A divalent FHA/BRCT-binding mechanism couples the MRE11-RAD50-NBS1 complex to damaged chromatin. Hari FJ, et al. EMBO Rep, 2010 May. PMID 20224574.Analysis of the expression of human tumor antigens in ovarian cancer tissues. Ali-Fehmi R, et al. Cancer Biomark, 2010. PMID 20164540.

Images



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