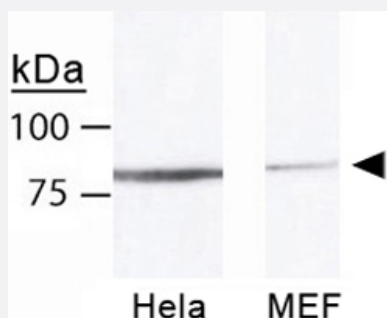


MRE11A polyclonal antibody

Catalog # PAB12381

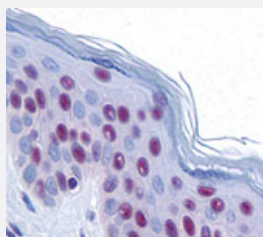
Size 50 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of MRE11A on 50 ug of HeLa and MEF lysates, using MRE11A polyclonal antibody (Cat # PAB12381).



Immunohistochemistry

Staining of MRE11A in the human epidermis using MRE11A polyclonal antibody (Cat # PAB12381).

Specification

Product Description Rabbit polyclonal antibody raised against MRE11A.

Immunogen Full length human MRE11A.

Host Rabbit

Reactivity Hamster, Human, Mouse

Specificity This antibody is specific to human Mre11.

Form Liquid

Quality Control Testing Antibody Reactive Against MRE11A.

Recommend Usage	Immunofluorescence (1:200) Western Blot (1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In antiserum
Storage Instruction	Store at 4°C for short term storage. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

Western blot analysis of MRE11A on 50 ug of HeLa and MEF lysates, using MRE11A polyclonal antibody (Cat # PAB12381).

- Immunohistochemistry

Staining of MRE11A in the human epidermis using MRE11A polyclonal antibody (Cat # PAB12381).

- Immunofluorescence

- Immunoprecipitation

Gene Info — MRE11A

Entrez GeneID	4361
Protein Accession#	P49959
Gene Name	MRE11A
Gene Alias	ATLD, HNGS1, MRE11, MRE11B
Gene Description	MRE11 meiotic recombination 11 homolog A (S. cerevisiae)
Omim ID	600814 604391
Gene Ontology	Hyperlink

Gene Summary

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]

Other Designations

AT-like disease|DNA recombination and repair protein|double-strand break repair protein MRE11A|endo/exonuclease Mre11|meiotic recombination 11 homolog A

Publication Reference

- [The functional interactome of PYHIN immune regulators reveals IFIX is a sensor of viral DNA.](#)

Diner BA, Li T, Greco TM, Crow MS, Fuesler JA, Wang J, Cristea IM.

Molecular Systems Biology 2015 Feb; 11(1):787.

Application: IF, Human, HEK293 cells

- [Temporal regulation of the Mre11-Rad50-Nbs1 complex during adenovirus infection.](#)

Karen KA, Hoey PJ, Young CS, Hearing P.

Journal of Virology 2009 Feb; 83(9):4565.

- [ATM activation and signaling under hypoxic conditions.](#)

Bencokova Z, Kaufmann MR, Pires IM, Lecane PS, Giaccia AJ, Hammond EM.

Molecular and Cellular Biology 2009 Jan; 29(2):526.

Application: WB, Human, GM0536 cells

- [Cellular proteins PML and Daxx mediate an innate antiviral defense antagonized by the adenovirus E4 ORF3 protein.](#)

Ullman AJ, Hearing P.

Journal of Virology 2008 Aug; 82(15):7325.

Application: IF, Human, HT-1080 cells

- [Ataxia telangiectasia-mutated damage-signaling kinase- and proteasome-dependent destruction of Mre11-Rad50-Nbs1 subunits in Simian virus 40-infected primate cells.](#)

Zhao X, Madden-Fuentes RJ, Lou BX, Pipas JM, Gerhardt J, Rigell CJ, Fanning E.

Journal of Virology 2008 Jun; 82(11):5316.

Application: IF, WB, Monkey, BSC40 cells

- [DNA replication licensing in somatic and germ cells.](#)

Eward KL, Obermann EC, Shreeram S, Loddo M, Fanshawe T, Williams C, Jung HI, Prevost AT, Blow JJ, Stoeber K, Williams GH.

Journal of Cell Science 2004 Nov; 117(Pt 24):5875.

Pathway

- [Homologous recombination](#)
- [Non-homologous end-joining](#)

Disease

- [Adenocarcinoma](#)
- [Ataxia telangiectasia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [DNA Damage](#)
- [Genetic Predisposition to Disease](#)
- [Glioma](#)
- [Hematologic Diseases](#)
- [Hodgkin Disease](#)
- [Kidney Failure](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Multiple Sclerosis](#)
- [Neoplasms](#)

- [Occupational Diseases](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Spinocerebellar ataxia](#)
- [Urinary Bladder Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)