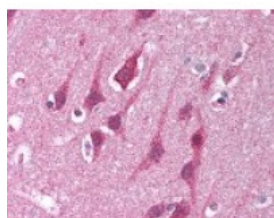




## MRE11A Antibody

CATALOG NUMBER: 48-672



Immunohistochemistry staining of MRE11A in brain cortex tissue using MRE11A Antibody.

### Specifications

<b>SPECIES REACTIVITY:</b>	Human, Mouse
<b>TESTED APPLICATIONS:</b>	ELISA, IF, IHC, WB
<b>APPLICATIONS:</b>	MRE11A antibody can be used in ELISA starting at 1:5000 - 1:25000, Western Blot starting at 1:500 - 1:3000, immunohistochemistry starting at 2.5 ug/mL, and immunofluorescence.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>IMMUNOGEN:</b>	MRE11A antibody was raised against amino acids 68 - 706 of MRE11A (Mouse).
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	Immunoaffinity Chromatography
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	0.02 M potassium phosphate, 0.15 M sodium chloride, pH 7.2, 0.01% sodium azide.
<b>STORAGE CONDITIONS:</b>	Store MRE11A antibody at 4 °C or -20 °C. As with all antibodies avoid freeze/thaw cycles.
<b>CLONALITY:</b>	Polyclonal
<b>CONJUGATE:</b>	Unconjugated

### Additional Info

<b>ALTERNATE NAMES:</b>	MRE11A, AT-like disease, Endo/exonuclease Mre11, HNGS1, MRE11, MRE11 homolog 1, MRE11 homolog A, MRE11B, ATLD
<b>ACCESSION NO.:</b>	P49959
<b>PROTEIN GI NO.:</b>	17380137
<b>OFFICIAL SYMBOL:</b>	MRE11A
<b>GENE ID:</b>	4361

### Background

**BACKGROUND:** Mre11 is a component of the MRN complex (Mre11/Rad50/Nbs1), 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. Mre11 is a nuclear protein that is widely expressed and localizes to discrete nuclear foci after treatment with genotoxic agents (including irradiation). Alternative splice isoforms are recorded for this protein.

---

**FOR RESEARCH USE ONLY**

December 13, 2016