

## Product datasheet for **TA306897**

### MRE11 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1 - 2 ug/mL, ICC: 5 ug/mL, IF: 20 ug/mL
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	MRE11 antibody was raised against a 14 amino acid peptide from near the amino terminus human MRE11.
Formulation:	PBS containing 0.02% sodium azide.
Concentration:	1ug/ul
Purification:	Affinity chromatography purified via peptide column
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	MRE11 homolog A, double strand break repair nuclease
Database Link:	<a href="#">NP_005581</a> <a href="#">Entrez Gene 17535 Mouse</a> <a href="#">Entrez Gene 64046 Rat</a> <a href="#">Entrez Gene 4361 Human</a> <a href="#">P49959</a>



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**Background:**

MRE11 is involved in the repair of DNA double strand breaks as part of a complex that includes the Rad50 and NBS1 protein and is thought to act in the same pathway as the A-T mutated (ATM) protein. 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 non-homologous 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. Mutations in this protein result in a novel ataxia telangiectasia-like disorder (ATLD). Unlike the ATM protein, MRE11 is necessary proper mammalian development.

**Synonyms:**

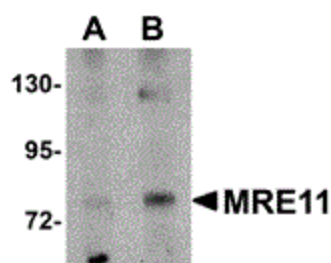
ATLD; HNGS1; MRE11; MRE11B

**Protein Families:**

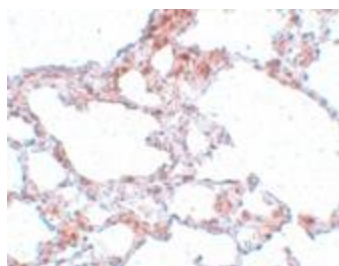
Druggable Genome, Stem cell - Pluripotency

**Protein Pathways:**

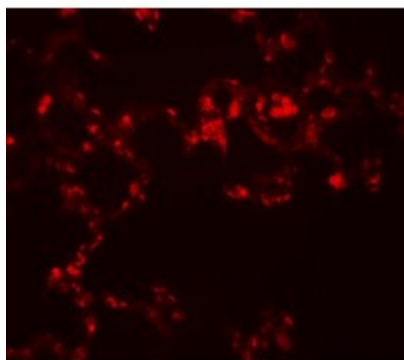
Homologous recombination, Non-homologous end-joining

**Product images:**

Western blot analysis of MRE11 in rat lung tissue lysate with MRE11 antibody at (A) 1 and (B) 2 ug/mL.



Immunohistochemistry of MRE11 in rat lung tissue with MRE11 antibody at 5 ug/mL.



Immunofluorescence of MRE11 in rat lung tissue with MRE11 antibody at 20 ug/mL.