

Rabbit Anti-phospho-Mre11 (Ser678) antibody

SL17752R

Product Name:	phospho-Mre11 (Ser678)
Chinese Name:	磷酸化DNA损伤关键蛋白Mrell抗体
Alias:	Mre11 (phospho S678); p-Mre11 (phospho S678); AT like disease; Ataxia telangiectasia disorder like; ATLD; DNA recombination and repair protein; Double strand break repair protein MRE11A; Double-strand break repair protein MRE11A; endo/exonuclease Mre11; HNGS1; meiotic recombination (S. cerevisiae) 11 homolog A; Meiotic recombination 11 homolog 1; meiotic recombination 11 homolog A (S. cerevisiae); Meiotic recombination 11 homolog A; MmMRE11A; Mre 11; MRE 11a; MRE 11b; MRE11 homolog 1; MRE11 homolog A; MRE11 meiotic recombination 11 homolog A (S. cerevisiae); MRE11 meiotic recombination 11 homolog A; MRE11_HUMAN; MRE11A; MRE11b; OTTHUMP00000236830; OTTHUMP00000236831; OTTHUMP00000236832; OTTHUMP00000236833.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	81kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human Mre11 around the phosphorylation site of Ser678:SQ(p-S)QV
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized

	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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] Function: Component of the MRN complex, 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 scarches 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. Subcellular Location: Nucleus. Localizes to discrete nuclear foci after treatment with genotoxic agents. Post-translational modifications: Phosphorylated upon DNA damage, probably by ATM or ATR. DISEASE: Defects in MRE11A are a cause of ataxia telangicctasia-like disorder (ATLD) [MIM:604391]. ATLD is a disease with the same clinical feature than ataxiatelangicctasia but with a somewhat milder clinical course.
	Similarity:
	Belongs to the MRE11/RAD32 family.
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SWISS: P49959

Gene ID: 4361

Database links:

Entrez Gene: 4361 Human

Omim: 600814 Human

SwissProt: P49959 Human

Unigene: 192649 Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.