

Rabbit MRE11A Polyclonal Antibody | anti-MRE11A antibody

MRE11A Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326762	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

MRE11A; Polyclonal Antibody; MRE11A Antibody; 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; MRE11b; OTTHUMP00000236830; OTTHUMP00000236831; OTTHUMP00000236832; OTTHUMP00000236833; anti-MRE11A antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MRE11A antibody detects endogenous levels of total MRE11A
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	680
Applicable Applications for anti-MRE11A antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MRE11A
Subcellular Location	Nucleus. Localizes to discrete nuclear foci after treatment with genotoxic agents.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA326762 staining NIH-3T3 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



WB (Western Blot)

Western blot analysis of Jurkat whole cell lysates, using MRE11A Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326762 at 1/100 staining Human gastric tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-MRE11A antibody	Description: 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. 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 MRE11. 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 MRE11 to prevent nucleolytic degradation past a given point (PubMed:9651580, PubMed:9590181, PubMed:9705271, PubMed:11741547). The complex may also be required for DNA damage signaling via activation of the ATM kinase (PubMed:15064416). In telomeres the MRN complex may modulate t-loop formation (PubMed:10888888). Subunit Structure: Component of the MRN complex composed of two heterodimers RAD50/MRE11 associated with a single NBN (PubMed:9651580, PubMed:9590181, PubMed:9705271, PubMed:10839544). Component of the BASC complex, at least composed of BRCA1, MSH2, MSH6, MLH1, ATM, BLM, RAD50, MRE11 and NBN (PubMed:10783165). Found in a complex with TERF2 (PubMed:10888888). Interacts with DCLRE1C/Artemis and DCLRE1B/Apollo (PubMed:15456891, PubMed:15723659). Interacts with ATF2 (PubMed:15916964). Interacts with EXD2 (PubMed:26807646). Interacts with MRNIP (PubMed:27568553). Similarity: Belongs to the MRE11/RAD32 family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	24234690
NCBI GeneID	4361
NCBI Accession #	NP_005581.2
NCBI GenBank Nucleotide #	NM_005590.3
UniProt Accession #	P49959; O43475; B3KTC7
Molecular Weight	Observed: 80 kDa Predicted: 81 kDa
NCBI Official Full Name	double-strand break repair protein MRE11 isoform 2
NCBI Official Synonym Full Names	MRE11 homolog, double strand break repair nuclease
NCBI Official Symbol	MRE11
NCBI Official Synonym Symbols	ATLD; HNGS1; MRE11A; MRE11B
NCBI Protein Information	double-strand break repair protein MRE11
UniProt Protein Name	Double-strand break repair protein MRE11
UniProt Gene Name	MRE11

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/mre11a-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/326762>