

MRE11 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51361**Specification**

MRE11 Antibody - Product Information

Application	WB
Primary Accession	P49959
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	80 KDa
Antigen Region	361 - 420

MRE11 Antibody - Additional Information**Gene ID** 4361**Other Names**

Double-strand break repair protein MRE11A, Meiotic recombination 11 homolog 1, MRE11 homolog 1, Meiotic recombination 11 homolog A, MRE11 homolog A, MRE11A, HNGS1, MRE11

Target/Specificity

KLH conjugated synthetic peptide derived from human MRE11

Dilution

WB~~ 1:1000

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

MRE11 Antibody - Protein Information**Name** MRE11 ([HGNC:7230](#))**Synonyms** HNGS1, MRE11A**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 (PubMed:9651580, PubMed:9590181, PubMed:9705271, PubMed:11741547, PubMed:29670289). The complex

possesses single-strand endonuclease activity and double-strand- specific 3'-5' exonuclease activity, which are provided by MRE11 (PubMed:9651580, PubMed:9590181, PubMed:9705271, PubMed:11741547, PubMed:29670289). RAD50 may be required to bind DNA ends and hold them in close proximity (PubMed:9651580, PubMed:9590181, PubMed:9705271, PubMed:11741547, PubMed:29670289). 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, PubMed:29670289, PubMed:30612738). 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).

Cellular Location

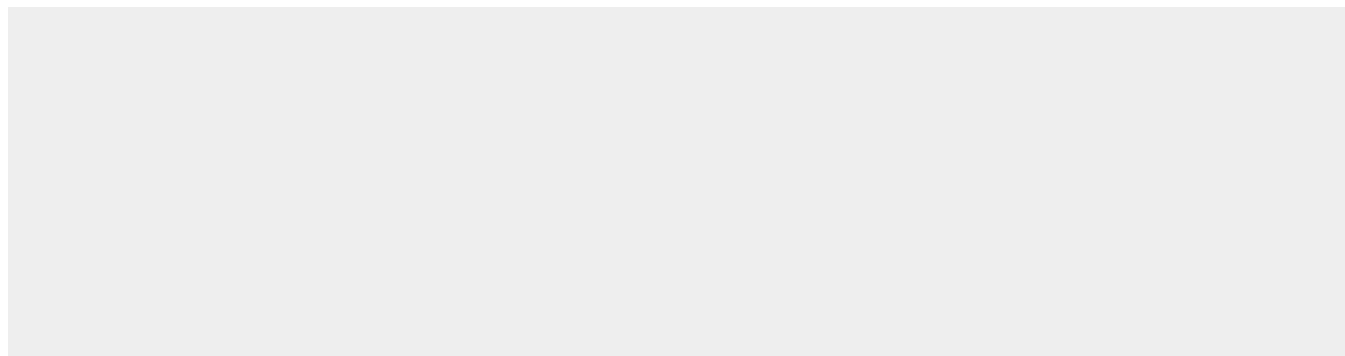
Nucleus. Chromosome, telomere. Chromosome. Note=Localizes to discrete nuclear foci after treatment with genotoxic agents.

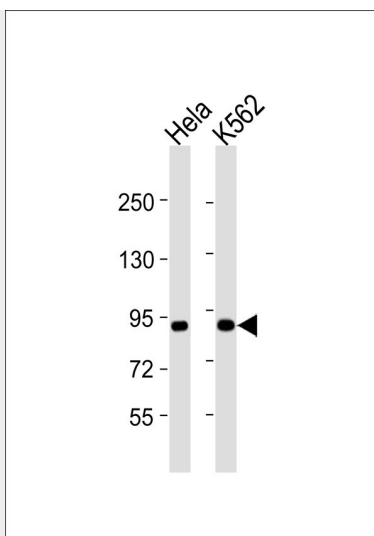
MRE11 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MRE11 Antibody - Images





All lanes : Anti-MRE11 Antibody at 1:1000 dilution Lane 1: HeLa whole cell lysates Lane 2: K562 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 81 kDa Blocking/Dilution buffer: 5% NFDm/TBST.

MRE11 Antibody - Background

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 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 Antibody - References

Petrini J.H.J.,et al.Genomics 29:80-86(1995).
Petrini J.H.J.,et al.Submitted (NOV-1998) to the EMBL/GenBank/DDBJ databases.
Chamankhah M.,et al.Submitted (SEP-1997) to the EMBL/GenBank/DDBJ databases.
Paull T.T.,et al.Mol. Cell 1:969-979(1998).
Pitts S.A.,et al.Hum. Mol. Genet. 10:1155-1162(2001).