

**Anti-MRE11 Antibody, clone 15B8.1E7.6 clone 15B8.1E7.6, from hamster(Armenian)**

Art. ID	SAF-MABE1153
Unit	EA
Deliverydetails	No Dangerous Good

**Description**

Double-strand break repair protein MRE11A (UniProt: Q61216, also known as MmMRE11A, Meiotic recombination 11 homolog 1, MRE11 homolog 1, Meiotic recombination 11 homolog A, MRE11 homolog A) is encoded by the Mre11a (also known as Mre11) gene (Gene ID: 17535) in murine species. MRE11A a nuclear protein involved in homologous recombination, telomere length maintenance, and DNA double-strand break repair. It localizes to discrete nuclear foci after treatment with genotoxic agents. MRE11A is a component of the MRN complex that possesses single-strand endonuclease activity and double-strand-specific 3'-5' exonuclease activity. MRE11A forms a complex with the RAD50 homolog, which is required for non-homologous joining of DNA end. RAD50 may be required to bind DNA ends and hold them in close proximity, which 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. In conjunction with a DNA ligase, MRE11A is reported to promote the joining of non-complementary ends in vitro using short homologies near the ends of the DNA fragments.