



# Recombinant Mouse Double-strand break repair protein MRE11A (Mre11a)

<b>Product Code</b>	CSB-MP723404MO
<b>Abbreviation</b>	Mre11a
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	Q61216
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Mus musculus (Mouse)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	SPTDPLDDE DTFKILVATD IHLGFMEKDA VRGNDFVTF DEILRLALEN EVDIFLLGGD LFHENKPSRK TLHSCLELLR KYCMGDRPVQ FEVISDQSVN FGFSKFPWVN YQDGNLNISI PVFSIHGNHD DPTGADALCA LDVLSGAGFV NHFGRSMSVE KVDISPVLLQ KGSTKLALYG LGSIPDERLY RMFVNKKVTM LRPKEDENSW FNLFVIHQNR SKHGNTNFIP EQFLDDFIDL VIWGHEHECK IGPIKNEQQL FYVSQPGSSV VTSLSPGEAV KKHVGLLRK GRKMMNQKLP LRTVRRFFIE DVVLANHPNL FNPDPKVTQ AIQSFCLEKI EEMLDSAERE RLGNPQQPGK PLIRLRVDYS GGFEPFNVLR FSQKFVDRVA NPKDVIHFFR HREQKGTGE EINFGMLITK PASEGATLRV EDLVKQYFQT AEKNVQLSLL TERGMGEAVQ EFVDKEEKDA IEELVKYQLE KTQRFLKERH IDALEDKIDE EVRRFRESRQ RNTNEEDDEV REAMSRARAL RSQSETSTA FSAEDLSFDT SEQTANDSDD SLSAVPSRGR GRGRGRRGAR GQSSAPRGGG QRGRDTGLEI TTRGRSSKAT SSTRNMSII DAFRSTRQQP SRNVAPKNYS ETIEVDDSD EDDIFPTNSRA DQRWSGTTSS KRMSQSQTAK GVDSEDEDD DDDPFMSSSC PRRNRR
<b>Source</b>	Mammalian cell
<b>Target Names</b>	Mre11
<b>Protein Names</b>	Recommended name: Double-strand break repair protein MRE11A Short name= MmMRE11A Alternative name(s): Meiotic recombination 11 homolog 1 Short name= MRE11 homolog 1 Meiotic recombination 11 homolog A Short name= MRE11 homo
<b>Expression Region</b>	2-706
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	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.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

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