



Recombinant Rat Double-strand break repair protein MRE11A (Mre11a)

Product Code	CSB-EP864326RA-B
Abbreviation	Mre11a
Storage	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.
Uniprot No.	Q9JIM0
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	>85% (SDS-PAGE)
Sequence	SPTDPLDDE DTFKILVATD IHLGFMEKDA VRGNDFVTF DEILRLALEN EVDIFLLGGD LFHENKPSRK TLHSCLELLR KYCMGDRPVQ FEIISDQSVN FGFSKFPWVN YRDGNLNISI PVFSIHGNHD DPTGADALCA LDVLSGAGFV NHFGRSMSVE KVDISPVLLQ KGSTKLALYG LGSIPDERLY RMFVNKKVTM LRPKEDENSW FNLFVIHQNR SKHGSTNFIP EQFLDDFIDL VIWGHEHECK IGPTRNEQQL FYVSQPGSSV VTALSPGETV KKHVGLLRVK GRKMNMQKLP LRTVRQFFME DVVLANHPSL FNPDPNPKVTQ AIQSFCLEKI EEMLDSAERE RLGNPQQPEK PLIRLRVDYS GGFEPFNVL RFSQKFVDRVA NPKDVIHFFR HREQKGTGE EINFGKLIK PASEGTTLRV EDLVKQYFQT AEKNVQLSLL TERGMGEAVQ EFVDKEEKDA IEELVKYQLE KTQRFLKERH IDALEDKIDE EVRRFRESRQ RNTNEEDDEV REAMSRARAL RSQSENAASA FSADDLSFDI TEQTADDSDD SQSAVPSRGR GRGRGRRGGR GQSTAPRGGS QRGRDTGLGI STRGRSSKAT ASTSRNMSII DAFRSTRQQP SRNVATKNYS ETIEVDESDD DDSFPTSSRA DQRWSGTAPS KRMSQSQTAK GVDFESDEDD DDDPFMSGSC PRRNRR
Source	E.coli
Target Names	Mre11
Protein Names	Recommended name: Double-strand break repair protein MRE11A Alternative name(s): Meiotic recombination 11 homolog 1 Short name= MRE11 homolog 1 Meiotic recombination 11 homolog A Short name= MRE11 homolog A
Expression Region	2-706
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	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.

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.

Shelf Life

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