EMPOWER YOUR RESEARCH

## Product datasheet for RC209414L2

OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

## MRE11A (MRE11) (NM_005591) Human Tagged Lenti ORF Clone

## Product data:

## Product Type: Expression Plasmids

Product Name:
Tag:
Symbol:
Synonyms:
Mammalian Cell
Selection:
Vector:
E. coli Selection:

ORF Nucleotide
Sequence:
Restriction Sites:
Cloning Scheme:

MRE11A (MRE11) (NM_005591) Human Tagged Lenti ORF Clone mGFP
MRE11
ATLD; HNGS1; MRE11A; MRE11B
None
pLenti-C-mGFP (PS100071)
Chloramphenicol ( $34 \mathrm{ug} / \mathrm{mL}$ )
The ORF insert of this clone is exactly the same as(RC209414).

Sgfl-Mlul

Cloning sites used for ORF Shuttling:

Pme I
----- GGA CTC AGA TAA GTT TAA ACGGccgaccgcga

* The last codon before the Stop codon of the ORF.
ACCN:
ORF Size:
NM_005591
2124 bp

OTI Disclaimer:

OTI Annotation:

Components:

Reconstitution Method:

RefSeq:
RefSeq Size:
RefSeq ORF:
Locus ID:
UniProt ID:
Cytogenetics:
Domains:
Protein Families:
Protein Pathways:
MW:
Gene Summary:

1. Centrifuge at $5,000 \mathrm{xg}$ for 5 min .
2. Carefully open the tube and add 100 ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000 xg ) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at $-20^{\circ} \mathrm{C}$. The DNA is stable for at least one year from date of shipping when stored at $-20^{\circ} \mathrm{C}$.
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

NM 005591.3
5141 bp
2127 bp
4361
P49959
11q21
Metallophos, Mre11_DNA_bind
Druggable Genome, Stem cell - Pluripotency
Homologous recombination, Non-homologous end-joining
80.6 kDa

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. [provided by RefSeq, Jul 2008]

## Product images:



