

## Product datasheet for **RC209414L4V**

### **MRE11A (MRE11) (NM\_005591) Human Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	MRE11A (MRE11) (NM_005591) Human Tagged ORF Clone Lentiviral Particle
Symbol:	MRE11
Synonyms:	ATLD; HNGS1; MRE11A; MRE11B
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_005591
ORF Size:	2124 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC209414).
OTI Disclaimer:	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. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_005591.3</a>
RefSeq Size:	5141 bp
RefSeq ORF:	2127 bp
Locus ID:	4361
UniProt ID:	<a href="#">P49959</a>
Cytogenetics:	11q21
Domains:	Metallophos, Mre11_DNA_bind
Protein Families:	Druggable Genome, Stem cell - Pluripotency



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**Protein Pathways:** Homologous recombination, Non-homologous end-joining

**MW:** 80.6 kDa

**Gene Summary:** 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]