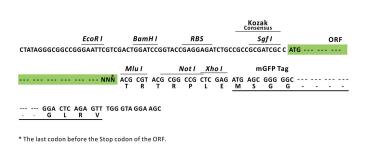


# Product datasheet for MR225144L4

# Peg10 (NM\_001040611) Mouse Tagged Lenti ORF Clone

### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Peg10 (NM_001040611) Mouse Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Peg10
Synonyms:	AA407948; Ed; Edr; HB-1; Ma; Mar; Mar2; Mart2; MEF3; MEF3L; MyEF-3; Rt; Rtl2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR225144).
<b>Restriction Sites:</b>	Sgfl-Mlul
Cloning Scheme:	
	Cloning sites used for ORF Shuttling:
	<i>Sgf I</i> ORF <i>MIu I</i> GCG ATC GCC <mark>ATG // NNŇ</mark> ACG CGT



ACCN: ORF Size: NM\_001040611 1128 bp

#### OriGene Technologies, Inc.

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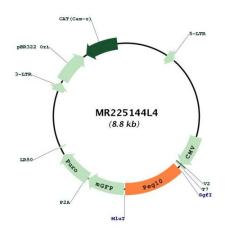
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Peg10 (NM_001040611) Mouse Tagged Lenti ORF Clone – MR225144L4	
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ 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. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	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).
Reconstitution Method:	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li> </ol>
RefSeq:	<u>NM 001040611.1, NP 001035701.1</u>
RefSeq Size:	6677 bp
RefSeq ORF:	1131 bp
Locus ID:	170676
UniProt ID:	<u>Q7TN75</u>
Cytogenetics:	6 1.81 cM
Gene Summary:	This is a paternally expressed imprinted gene that is thought to have been derived from the Ty3/Gypsy family of retrotransposons. It contains two overlapping open reading frames, RF1 and RF2, and expresses two proteins: a shorter, gag-like protein (with a CCHC-type zinc finger domain) from RF1; and a longer, gag/pol-like fusion protein (with an additional aspartic protease motif) from RF1/RF2 by -1 translational frameshifting (-1 FS). While -1 FS has been observed in RNA viruses and transposons in both prokaryotes and eukaryotes, this gene represents the first example of -1 FS in a eukaryotic cellular gene. This gene is highly conserved across mammalian species and retains the heptanucleotide (GGGAAAC) and pseudoknot elements required for -1 FS. It is expressed in adult and embryonic tissues (most notably in placenta) and reported to have a role in cell proliferation, differentiation, apoptosis and cancer development. Knockout mice lacking this gene showed early embryonic lethality

and cancer development. Knockout mice lacking this gene showed early embryonic lethality with placental defects, indicating the importance of this gene in embryonic development. [provided by RefSeq, Oct 2014]

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## **Product images:**



Circular map for MR225144L4

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