

Product datasheet for RC221556L2

OriGene Technologies, Inc.

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MARK1 (NM_018650) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MARK1 (NM_018650) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: MARK1

Synonyms: MARK; Par-1c; Par1c

Mammalian Cell None

Selection:

Vector: pLenti-C-mGFP (PS100071)

E. coli Selection: Chloramphenicol (34 ug/mL)

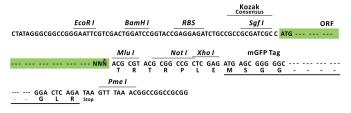
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC221556).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



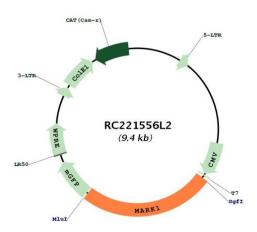


^{*} The last codon before the Stop codon of the ORF.





Plasmid Map:



ACCN: NM_018650 **ORF Size:** 2385 bp

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. More info

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: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul 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 5000xg) to concentrate the liquid

at the bottom.

5. 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.

RefSeq: <u>NM 018650.3</u>

RefSeq Size: 5293 bp RefSeq ORF: 2388 bp



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 Locus ID:
 4139

 UniProt ID:
 Q9P0L2

 Cytogenetics:
 1q41

Domains: UBA, pkinase, TyrKc, KA1, S_TKc

Protein Families: Druggable Genome, Protein Kinase

MW: 88.8 kDa

Gene Summary: Serine/threonine-protein kinase (PubMed:23666762). Involved in cell polarity and microtubule

dynamics regulation. Phosphorylates DCX, MAP2 and MAP4. Phosphorylates the microtubule-

associated protein MAPT/TAU (PubMed:23666762). Involved in cell polarity by

phosphorylating the microtubule-associated proteins MAP2, MAP4 and MAPT/TAU at KXGS motifs, causing detachment from microtubules, and their disassembly. Involved in the regulation of neuronal migration through its dual activities in regulating cellular polarity and microtubule dynamics, possibly by phosphorylating and regulating DCX. Also acts as a positive regulator of the Wnt signaling pathway, probably by mediating phosphorylation of

dishevelled proteins (DVL1, DVL2 and/or DVL3).[UniProtKB/Swiss-Prot Function]