

Product datasheet for RC200093L2

OriGene Technologies, Inc.

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Mps1 (TTK) (NM_003318) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Mps1 (TTK) (NM_003318) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: Mps1

Synonyms: CT96; ESK; MPH1; MPS1; MPS1L1; PYT

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(RC200093).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_003318

ORF Size: 2571 bp





Mps1 (TTK) (NM_003318) Human Tagged Lenti ORF Clone - RC200093L2

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 003318.3</u>

RefSeq Size:3010 bpRefSeq ORF:2574 bpLocus ID:7272

 UniProt ID:
 P33981

 Cytogenetics:
 6q14.1

Domains: pkinase, TyrKc, S TKc

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Cell cycle, Oocyte meiosis, TGF-beta signaling pathway, Ubiquitin mediated proteolysis, Wnt

signaling pathway

MW: 97 kDa

Gene Summary: This gene encodes a dual specificity protein kinase with the ability to phosphorylate tyrosine,

serine and threonine. Associated with cell proliferation, this protein is essential for chromosome alignment at the centromere during mitosis and is required for centrosome

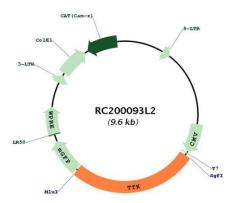
duplication. It has been found to be a critical mitotic checkpoint protein for accurate

segregation of chromosomes during mitosis. Tumorigenesis may occur when this protein fails

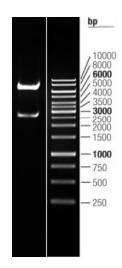
to degrade and produces excess centrosomes resulting in aberrant mitotic spindles. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2009]



Product images:



Circular map for RC200093L2



Double digestion of RC200093L2 using Sgfl and Mlul