GORǏGene
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## Product datasheet for RC200093L3

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

## Product data:

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

ORF Nucleotide
Sequence:
Restriction Sites:
Cloning Scheme:

Expression Plasmids
Mps1 (TTK) (NM_003318) Human Tagged Lenti ORF Clone
Myc-DDK
Mps1
CT96; ESK; MPH1; MPS1; MPS1L1; PYT
Puromycin
pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Chloramphenicol ( $34 \mathrm{ug} / \mathrm{mL}$ )
The ORF insert of this clone is exactly the same as(RC200093).

Sgfl-Mlul

Cloning sites used for ORF Shuttling:



GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG GTT TGGGTAGGAAG


* The last codon before the Stop codon of the ORF.
ACCN:
ORF Size:
NM_003318
2571 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 003318.3 NP 003309.2
3010 bp
2574 bp
7272
P33981
6q14.1
pkinase, TyrKc, S_TKc
Druggable Genome, Protein Kinase
Cell cycle, Oocyte meiosis, TGF-beta signaling pathway, Ubiquitin mediated proteolysis, Wnt signaling pathway
97.1 kDa

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:



Double digestion of RC200093L3 using Sgfl and Mlul

