

## Product datasheet for MR206205L4

## Ipmk (NM\_027184) Mouse Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Ipmk (NM\_027184) Mouse Tagged Lenti ORF Clone

Tag: mGFP Symbol: lpmk

**Synonyms:** 2410017C19Rik; AA408208; Impk

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(MR206205).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_027184

ORF Size: 1191 bp



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#### Ipmk (NM\_027184) Mouse Tagged Lenti ORF Clone - MR206205L4

**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 027184.1</u>

 RefSeq Size:
 5432 bp

 RefSeq ORF:
 1191 bp

 Locus ID:
 69718

 UniProt ID:
 Q7TT16

Cytogenetics: 10 B5.3

**Gene Summary:** Inositol phosphate kinase with a broad substrate specificity. Phosphorylates inositol 1,4,5-trisphosphate (Ins(1,4,5)P3) first to inositol 1,3,4,5-tetrakisphosphate and then to inositol

1,3,4,5,6-pentakisphosphate (Ins(1,3,4,5,6)P5) (PubMed:15939867). Phosphorylates inositol 1,3,4,6-tetrakisphosphate (Ins(1,3,4,6)P4). Phosphorylates glycero-3-phospho-1D-myo-inositol

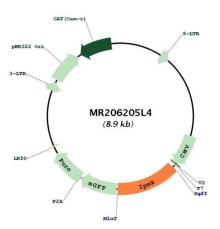
4,5-bisphosphate to glycero-3-phospho-1D-myo-inositol 3,4,5-trisphosphate. Plays an important role in MLKL-mediated necroptosis via its role in the biosynthesis of inositol pentakisphosphate (InsP5) and inositol hexakisphosphate (InsP6). Binding of these highly phosphorylated inositol phosphates to MLKL mediates the release of an N-terminal auto-inhibitory region, leading to activation of the kinase. Essential for activated phospho-MLKL to oligomerize and localize to the cell membrane during necroptosis (By similarity). Required for normal embryonic development, probably via its role in the biosynthesis of inositol 1,3,4,5,6-

pentakisphosphate (Ins(1,3,4,5,6)P5) and inositol hexakisphosphate (InsP6)

(PubMed:15939867).[UniProtKB/Swiss-Prot Function]



# **Product images:**



Circular map for MR206205L4