OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MG206205

Ipmk (NM_027184) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ipmk (NM_027184) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ipmk
Synonyms:	2410017C19Rik; AA408208; Impk
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG206205 representing NM_027184
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGCCGAGCCCCCAGCGCTGCGCCTGCGGCCGCCGGGAAGCACCGGAGACAGCCCGCCGGTGCCGC
GCCTGCTCGGAGGCTGCGTGCCGCTGTCGCATCAGGTGGCTGGCCACATGTACGGCAAGGACAAAGTGGG
CATACTCCAGCACCCAGATGGTACAGTTCTGAAACAGCTACAGCCACCGCCACGGGGCCCAAGAGAGCTG
GAATTTTATACCATGGTTTACGCTGCTGACTGTGCCGATGCTGTTCTCCTGGAGCTGCGAAAACACCTGC
CCAAATACTACGGCGTCTGGTCCCCTCCCACCGCACCAAACGATGTGTACCTAAAACTGGAAGATGTGAC
TCATAAGTTTAACAAACCCTGTATAATGGACGTGAAGATTGGGCGGAAGAGCTACGACCCCTTTGCGTCA
TCAGAGAAGATTCAGCAGCAGGTCAGCAAGTACCCTCTGATGGAGGAGATCGGGTTCCTGGTGCTCGGCA
TGAGGGTTTATCATCTTCACTCTGACAGCTACGAGACACAAAACCAGCACTATGGAAGAGGCCTAACGAA
AGAGACCCTGAAGGAAGGCGTCTCCAAGTTTTTCCACAATGGCTTCTGTTTAAGAAAAGATGCGATTGCC
GCCAGTATTCAGAAGGTAGAGAAGATTCTCCAGTGGTTTGAAAATCAGAAGCAGCTTAACTTTTACGCAA
GTTCTTTACTGTTTGTTTATGAAGGTTCATCTCAGCCAGCTACTACAAAAGCAAACGATAGAACTTTGGC
GGGGAGGTTTCTCTCCAAAGGACCCCTGACGGATGCGGACGGCCTGGAGTGCAATAACAACTTCCACCTG
TTCGGCGCCCCGCCCAACGGGATGTCGGTGGGCAAGAGCTTATCGAAGGCGTACTCGAGGCACAGAAAGC
TGTATGCAAAAAAGCACCAGAGTCAGACTTCCCTGAAAGTCGAAACGCTGGAGCAAGACAACGGGTGGAG
AAGCATGTCCCAGGAACACTTAAACGGAAACGTGCTTGCCCAACTGGAAAAGGTGTTCTACCACCTTCCC
GCGGGTCGTCCGGAGATCCCGGAAGCGGAAGTACGGATGATAGACTTTGCTCACGTGTTCCCTAGCAACA
CAGTCGATGAGGGGTATGTTTACGGTCTGAAGCATCTAATTGCCGTGCTTCGGAGTATTTTAGACAGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

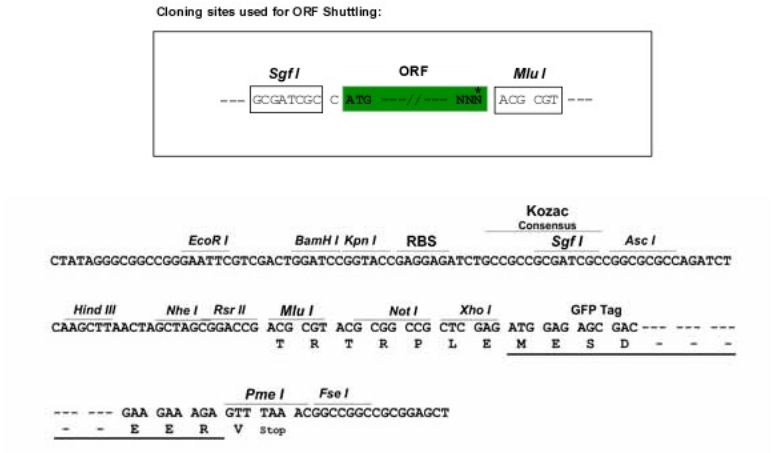
>MG206205 representing NM_027184
Red=Cloning site Green=Tags(s)

MAAEPPALRLRPPGSTGDSPPVPRLLGGCVPLSHQVAGHMYGKDKVGILQHPDGTVLKQLQPPPRGPREL
EFYTMVYAADCADAVLLELRKHLPKYYGVWSPPTAPNDVYLKLEDVTHKFNKPCIMDVKIGRKSYDPFAS
SEKIQQQVSKYPLMEEIGFLVLGMRVYHLHSDSYETQNQHYGRGLTKETLKEGVSKFFHNGFCLRKDAIA
ASIQKVEKILQWFENQKQLNFYASSLLFVYEGSSQPATTKANDRTLAGRFLSKGPLTDADGLECNNNFHL
FGAPPNGMSVGKSLSKAYSRHRKLYAKKHQSQTSLKVETLEQDNGWRSMSQEHLNGNVLAQLEKVFYHLP
AGRPEIPEAEVRMIDFAHVFPSNTVDEGYVYGLKHLIAVLRSILDS

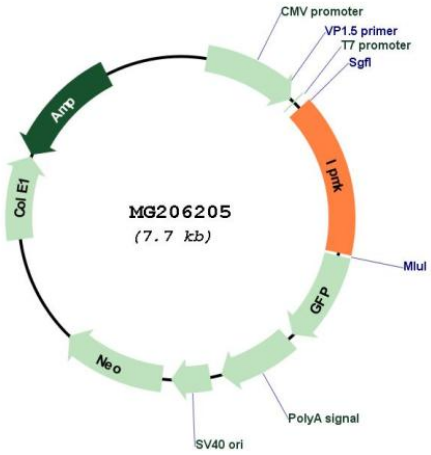
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_027184

ORF Size:	1188 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:	NM_027184.2
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]