

## Product datasheet for **MG224434**

### Inpp5f (NM\_178641) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Inpp5f (NM_178641) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Inpp5f
Synonyms:	5830435P03Rik; AI115354; AW561896; cl-27; hSAC2; mKIAA0966; SAC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG224434 representing NM_178641 Red=Cloning site Blue=ORF Green=Tags(s)

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**Protein Sequence:**

>MG224434 representing NM\_178641  
 Red=Cloning site Green=Tags(s)

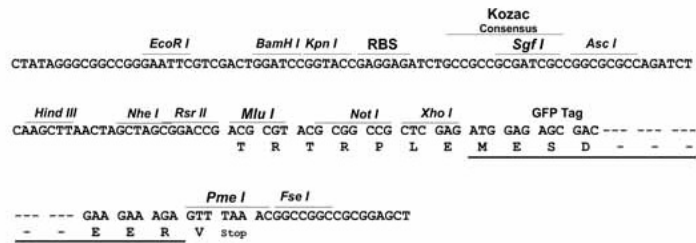
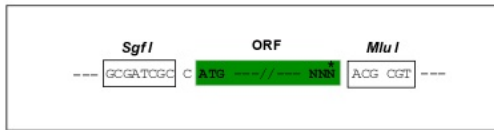
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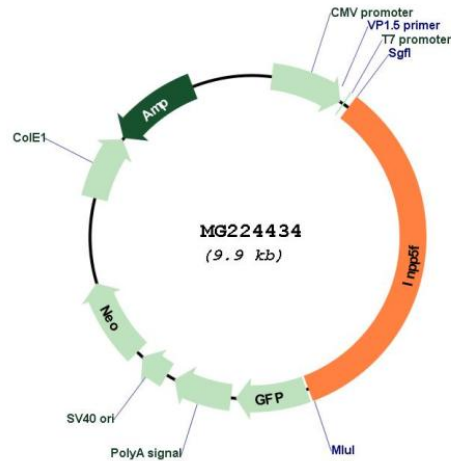
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_178641

**ORF Size:** 3396 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\\_178641.5](#), [NP\\_848756.2](#)

**RefSeq Size:** 4740 bp

**RefSeq ORF:** 3399 bp

**Locus ID:** 101490

**UniProt ID:** [Q8CDA1](#)

**Cytogenetics:** 7 F3

**Gene Summary:**

Inositol 4-phosphatase which mainly acts on phosphatidylinositol 4-phosphate. May be functionally linked to OCRL, which converts phosphatidylinositol 4,5-bisphosphate to phosphatidylinositol, for a sequential dephosphorylation of phosphatidylinositol 4,5-bisphosphate at the 5 and 4 position of inositol, thus playing an important role in the endocytic recycling (PubMed:25869668, PubMed:25869669). Regulator of TF:TFRC and integrins recycling pathway, is also involved in cell migration mechanisms (By similarity). Modulates AKT/GSK3B pathway by decreasing AKT and GSK3B phosphorylation (PubMed:17322895). Negatively regulates STAT3 signaling pathway through inhibition of STAT3 phosphorylation and translocation to the nucleus (By similarity). Functionally important modulator of cardiac myocyte size and of the cardiac response to stress (PubMed:19875726). May play a role as negative regulator of axon regeneration after central nervous system injuries (PubMed:26203138).[UniProtKB/Swiss-Prot Function]