

## Product datasheet for MR205969

### Ppm1a (NM\_008910) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ppm1a (NM_008910) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ppm1a
Synonyms:	2310003C21Rik; 2900017D14Rik; AI427932; AU017636; MMPa-2; MPPa-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205969 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGAGCATTTTTAGACAAGCCAAAGATGGAGAAGCATAATGCCAGGGGCAGGGGAATGGGTTACGAT  
ACGGCCTAAGCAGCATGCAAGTTGGCGAGTTGAAATGGAGGACGCACACACGGCTGTGATCGGTTTGCC  
AAGTGGACTTGAGACATGGTCATTCTTTGCTGTATATGATGGGCATGCTGGTTCTCAGGTTGCCAAATAC  
TGCTGTGAGCACTTGTAGATCACATACCAATAACCAGGATTTTCAGAGGATCTGCAGGAGCACCTTCTG  
TGGAGAACGTAAGAATGGAATCAGAACAGGGTTCTGGAGATTGATGAACACATGAGAGTTATGTCAGA  
GAAGAAACATGGTGCAGATAGAAGCGGGTCAACAGCTGTGGCGCTCTAACTCTCTCCCAACATACTTAT  
TTCATTAAGTGTGGAGACTCGAGAGGTTTACTTTGTAGGAATAGAAAAGTTCACTTCTTCACACAAGACC  
ATAAACCAAGTAACCCGCTGAAAAAGAACGAATTGAGAAATGCAGGGGGCTCGGTGATGATTCAGCGTGT  
CAATGGCTCTCTGGCTGTATCGAGGGCCCTTGGGGATTTCGATTACAAATGTGTCCATGGAAAAGTCCC  
ACAGAGCAGCTTGTCTCCCAAGCCGAAAGTCCATGATATTGAAAGGTCTGAAGAAGATGACCAGTTCA  
TCATCCTTGCATGCGATGGCATCTGGGACGTGATGGGAAACGAAGAGCTCTGTGACTTTGTGAGATCCAG  
ACTTGAAGTCACTGATGACCTTGAGAAAGTTTGAATGAAGTGTGACACCTGCTTGTATAAGGGAAGT  
CGAGACAACATGAGTGTGATTTGATCTGTTTTCCAAGTGCACCCAAAGTCTCGGAGAGGGCGGTGAAGA  
AGGAGGCGGAGCTGGACAAGTACCTGGAGAGCAGAGTAGAAGAAATCATAAAGAAGCAGGTGGAAGGCGT  
CCCTGACTTAGTCCACGTGATGCGCACGTTAGCCAGTGAAGAACATCCCCAGCCTCCACCAGGGGTGAA  
TTGGCAAGCAAGCGGAATGTAATTGAAGCCGTTTACAATAGACTGAACCTTACAAAAATGACGACACTG  
ATTCTGCGTCAACCGATGATATGTGG

**ACGCGT**ACGGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205969 protein sequence  
Red=Cloning site Green=Tags(s)

MGAFLDKPKMEKHNAQQQGNGLRYGLSSMQGWRVEMEDAHTAVIGLPSGLETWSFFAVYDGHAGSQQVAKY  
 CCEHLLDHIITNNQDFRGSAGAPSVENVKNGIRTGFLEIDEHMRVMSEKKGADRSGSTAVGVLISQHTY  
 FINCGDSRGLLCRNKRKVFHFTQDHKPSNPLEKERIQNAGGSVMIQRVNGSLAVSRALGDFDYKCVHGKGP  
 TEQLVSPEPEVHDIERSEEDDQFIILACDGIWDVMGNEELCDFVRSRLEVTDLLEKVCNEVVDTCCLYKGS  
 RDNMSVILICFPSAPKVSAAVKKEAELDKYLESRVVEEIIKKQVEGVPLVHVMRTLASENIPSLPPGGE  
 LASKRNVIEAVYNRLNPYKNDTDSASTDDMW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_008910

**ORF Size:** 1149 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\\_008910.3](#)

**RefSeq Size:** 2789 bp

**RefSeq ORF:** 1149 bp

**Locus ID:** 19042

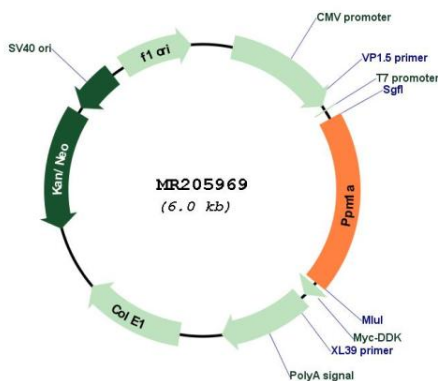
**UniProt ID:** [P49443](#)

**Cytogenetics:** 12 C3

**MW:** 42.4 kDa

**Gene Summary:** Enzyme with a broad specificity. Negatively regulates TGF-beta signaling through dephosphorylating SMAD2 and SMAD3, resulting in their dissociation from SMAD4, nuclear export of the SMADs and termination of the TGF-beta-mediated signaling (By similarity). Dephosphorylates PRKAA1 and PRKAA2. Plays an important role in the termination of TNF-alpha-mediated NF-kappa-B activation through dephosphorylating and inactivating IKKB/IKK. [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR205969