

Product datasheet for **RC210043**

PPM1F (NM_014634) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPM1F (NM_014634) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PPM1F
Synonyms:	CAMKP; CaMKPase; FEM-2; hFEM-2; POPX2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC210043 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCTCTGGAGCCCCACAGAAGAGCAGCCCAATGGCCAGTGGAGCTGAGGAGACCCAGGCTTCTCTGG
 ACACGCTCCTGCAAGACTTCCCAGCCCTGCTGAACCCAGAGGACCCTCTGCCATGGAAGGCCACAGGGAC
 GGTGCTCAGCCAGGAGGAGTGGAGGGCAGCTGGCTGAGCTGGCCATGGGCTTTCTGGGCAGCAGGAAG
 GCCCGCCACCACTTGTCTGCTCTGGCCACGAAGCAGTTTACAGCTGCTACAGACAGACCTTTCCG
 AATTCAGGAAGTTGCCAGGGAGGAAGAAGAAGAGGAGGAGGACGATGACGAGGAAAAGGCCCTGTGAC
 CTTGCTGGATGCCAAAGCCTGGCACAGAGTTTCTTTAACCGCTTTGGGAAGTCGCCGGCCAGTGGCAG
 AAGCAGGTGCCATTGGCTGCCGGGCTCACAGCGGCAGTGGCTGGTCTCCATCCACGCCATCCGGAACA
 CTCGCCGAAGATGGAGGACCGGCAGTGTCCCTCCCTTCAACCAGCTCTTCGGCTGTCTGACCC
 TGTGAACCGCCTACTTTGCTGTGTTGATGGTCACGGAGGCGTGGATGCTGCGAGGTACGCCGCTGTC
 CAGGTGCACACCAACGCTGCCCGCCAGCCAGAGCTGCCACAGACCCTGAGGGAGCCCTCAGAGAAGCCT
 TCCGGCGCACCGACCAGATGTTTCTCAGGAAAGCCAAGCGAGAGCGGCTGCAGAGCGGCACCACAGGTGT
 GTGTGCGCTCATTGCAGGAGCGACCCTGCACGTCGCTGGCTCGGGGATCCCAGGTCATTTTGGTACAG
 CAGGGACAGGTGGTGAAGCTGATGGAGCCACACAGACCAGAACGGCAGGATGAGAAGGCGCGCATTGAAG
 CATTGGGTGGCTTTGTGTCTCACATGGACTGCTGGAGAGTCAACGGGACCCTGGCCGTCTCCAGAGCCAT
 CGGGATGTCTCCAGAAGCCCTACGTGTCTGGGAGGCCGATGCAGCTTCCCGGCGCTGACGGGCTCC
 GAGGACTACCTGCTGCTGCCTGTGATGGCTTCTTTGACGTCGTACCCACCAGGAAGTTGTTGGCTGG
 TCCAGAGCCACCTGACCAGGCAGCAGGGCAGCGGGCTCCGTGTCGCCGAGGAGCTGGTGGCTGCCGCCG
 GGAGCGGGCTCCACGACAACATCACGGTCATGGTGGTCTTCTCAGGGACCCCAAGAGCTGCTGGAG
 GCGGGAACCGAGGAGAAGGGGACCCCAAGCAGAAGGGAGGAGGACGACTTGCCTCCAGCCTTCCAG
 AACCTGAGACCCAGGCTCCACCAAGAAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210043 protein sequence
 Red=Cloning site Green=Tags(s)

MSSGAPQKSSPMASGAETPGFLDTLLQDFPALLNPEDPLPWKAPGTVLSQEEVEGELAEALAMGFLGSRK
 APPPLAALAHEAVSLLQDLSEFRKLPREEEEEEDDDEEKAPVLLDAQSLAQSFNRLWEVAGQWQ
 KQVPLAARASQRQWLVSIAIRNTRRKMEDRHVSLPSFNQLFGLSDPVNRAYFAVFDGHGGVDAARYAAV
 HVHTNAARQPELPTDPEGALREAFRRDQMFRLKAKRERLQSGTTGVCAL IAGATLHVAVLGDSSQVILVQ
 QGQVVKLMEPHRPERQDEKARIEALGGFVSHMDCWRVNGTLAVSRAIGDVFQKPYVSGEADAASRALTGS
 EDYLLACDGFDFVPHQEVVGLVQSHLTRQQGSLRVAEELVAAARERGSNDNITVMVFLRDPQELLE
 GGNQEGDPQAEGRRQDLPSSLEPETQAPPRS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

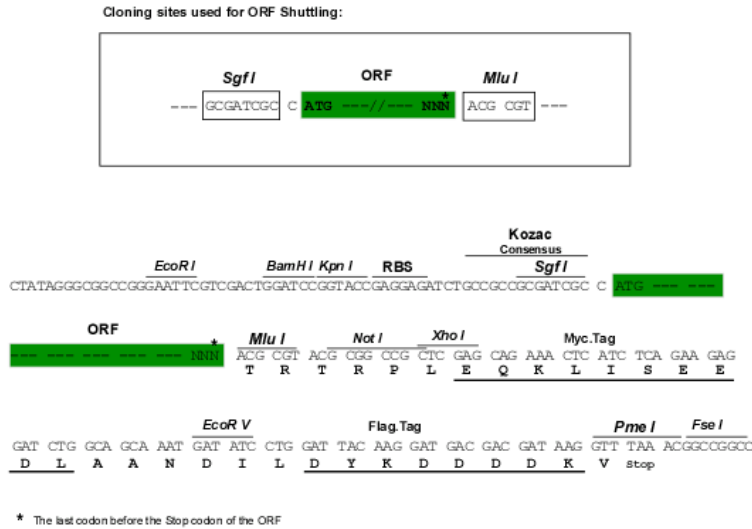
Chromatograms:

https://cdn.origene.com/chromatograms/mk6149_f12.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_014634

ORF Size: 3534 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_014634.4](#)

RefSeq Size: 5199 bp

RefSeq ORF: 1365 bp

Locus ID: 9647

UniProt ID: [P49593](#)

Cytogenetics: 22q11.22

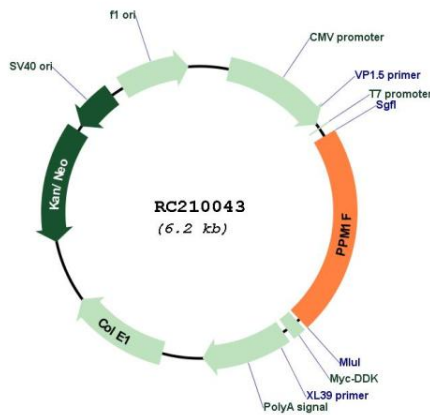
Domains: PP2C

Protein Families: Druggable Genome, Phosphatase

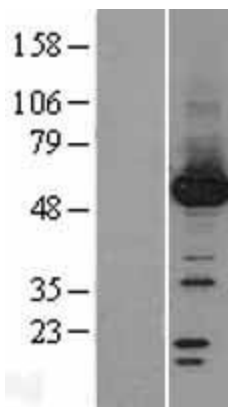
MW: 49.7 kDa

Gene Summary: The protein encoded by this gene is a member of the PP2C family of Ser/Thr protein phosphatases. PP2C family members are known to be negative regulators of cell stress response pathways. This phosphatase can interact with Rho guanine nucleotide exchange factors (PIX), and thus block the effects of p21-activated kinase 1 (PAK), a protein kinase mediating biological effects downstream of Rho GTPases. Calcium/calmodulin-dependent protein kinase II gamma (CAMK2G/CAMK-II) is found to be one of the substrates of this phosphatase. The overexpression of this phosphatase or CAMK2G has been shown to mediate caspase-dependent apoptosis. An alternatively spliced transcript variant has been identified, but its full-length nature has not been determined. [provided by RefSeq, Jul 2008]

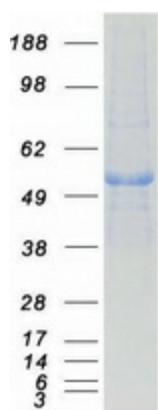
Product images:



Circular map for RC210043



Western blot validation of overexpression lysate (Cat# [LY402357]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210043 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PPM1F protein (Cat# [TP310043]). The protein was produced from HEK293T cells transfected with PPM1F cDNA clone (Cat# RC210043) using MegaTran 2.0 (Cat# [TT210002]).