

Product datasheet for **MG211903**

Plcg1 (NM_021280) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plcg1 (NM_021280) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Plcg1
Synonyms:	AI894140; Cded; Plc-1; Plc-gamma1; Plcg-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG211903 representing NM_021280 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGGCGTCGCGACCCCTGCGCCAACGGCTGCGGGCTGGCGCACCCCTCCGAAGCCGAGGTGCTGC
ACCTCTGCCGAGCCTCGAGGTGGGCACCGTCATGACTTTGTTCTACTCCAAGAAGTCGACGCGGCCAGA
ACGGAAGACCTTCCAGGTCAAGTTGGAGACGCGCCAGATCACATGGAGCCGCGCGCGGACAAAATCGAG
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AAGAAGACCCTGCCTTCCGGCCAGATCAATCACACTGCTTTGTATCCTCTATGGAATGGAATCCGCTT
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AGTCCCAATATGCGCTTCTCCGAGAGCGGCTGACGGACCTTGAACAGCGCAGCGGGGACATCACCTAC
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CAAGGAGCATGCTTTCGTAGCCTCAGAGTACCCAGTCATCCTGTCCATCGAGGACCCTGCAGCATTGCC
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AAGAATGGTATCCTCTACTTGGAGGACCCCGTGAATCATGAGTGGTATCCCCACTACTTCGTTCTGACTA
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CAGCCACTAACCTTATTGAGGATCCCTTACATGACAAGCTGTGGAAGTGTCTCTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTAA

Protein Sequence: >MG211903 representing NM_021280
 Red=Cloning site Green=Tags(s)

MAGVATPCANGCGPGAPSEAEVLHLCRSLEVGTVMTLFYSKKSQRPERKTFQVKLETRQITWSRGADKIE
 GSIDIREIKEIRPGKTSRDFDRYQEDPAFRPDQSHCFVILYGMFRLKTLQATSEDEVNMWIKGLTTL
 MEDTLQAATPLQIERLWKQFYSDNRNREDRISAKDLKNMLSQVNYRVPNMRFLRERLTDLEQRSGDITY
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 EAYARCLRMGCRCELDWCWDGPDGMPVIYHGHTLTTKIKFSDVLHTIKEHAFVASEYPVILSIEDHCSIA
 QQRNMAQHFRKVLGDTLLTKPVDIAADGLPSPNQLRRKILIKHKKLAEGSAYEEVPTSMYSENDISNSI
 KNGILYLEDPVNHWEYPHYFVL TSSKIYYSEETSSDQGNEDDEEPKEASSSTELHSSEKWFHGLGAGR
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 YGALYEGRNPGFYVEANPMPTFKCAVKALFDYKAQREDELTFKSAIQNVEKQDGGWWRGDIYGGKKQLW
 FPSNYVEEMINPAVLEPEREHLDENSPDGLLRGVLDPACQIAIRPEGKNNRLFVFSISMPVSAQWSD
 VAADSQEELQDWYKKIREVAQTADARL TEGKMMERRKIALELSELVVYCRPVFDEEKIGTERACYRDM
 SFPETKAEKYVNKAKGKFLQYNRLQLSRIYPKGQRLDSSNYDPLPMWICGSQVALNFQTPDKPMQMN
 QALFMAGHGCGYVLPSTMRDEAFDPFDKSSRLGLEPCVICIEVLGARHLPKNGRIGVCPFVEIEVAGAE
 YDSTKQKTEFVVDNGLNPVWPAKPFHFQISNPEFAFLRFVVEEDMFDQNFLAQTATFPVKGLKTGYRAV
 PLKNNYSEDL ELASLLIKIDIFPAKENGDLSPFSGISLRERASDASSQLFHVRRAREGSFEARYQQPFEDF
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TRTRPLE - GFP Tag - V

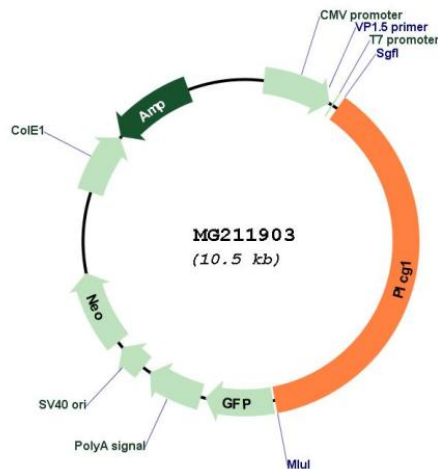
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_021280

ORF Size: 3906 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_021280.3](#), [NP_067255.2](#)

RefSeq Size: 4435 bp

RefSeq ORF: 3909 bp

Locus ID: 18803

UniProt ID: [Q62077](#)

Cytogenetics: 2 80.97 cM

Gene Summary:

Mediates the production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3). Plays an important role in the regulation of intracellular signaling cascades. Becomes activated in response to ligand-mediated activation of receptor-type tyrosine kinases, such as PDGFRA, PDGFRB, FGFR1, FGFR2, FGFR3 and FGFR4. Plays a role in actin reorganization and cell migration.[UniProtKB/Swiss-Prot Function]