

Product datasheet for **MG223280**

Plcz1 (NM_054066) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plcz1 (NM_054066) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Plcz1
Synonyms:	1700041H07Rik; PLCzeta
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG223280 representing NM_054066
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

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 GTGGAAAAATCAACGTTGAAATTACTCACAACTGCTTGAGAACTTGATTTCCCATGCCACTTTGCTCA
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 GCGAACCTTGAACCTTCTCACTGTTTATTTATGTTTGGTACTTCAGAGAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG223280 representing NM_054066
 Red=Cloning site Green=Tags(s)

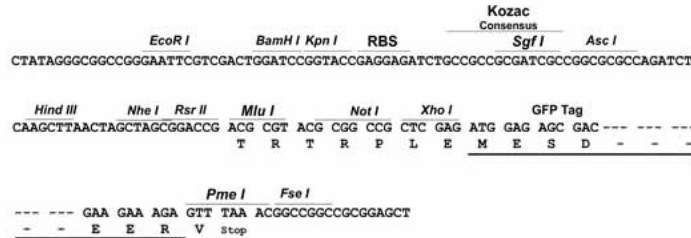
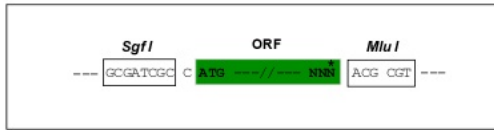
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 ARKLSKLRVHEFIFHTAAFITRVYPKMMRADSSNFNPQEFWNVGCMVALNFQTPGLPMDLQNGKFLDNG
 GSGYILKPDILRDITLGFNPNEPEYDDHPVLTIRIISGIQLPVSSSNTPDIVVIEVYVGNPDHVKQQ
 TRVVKNNAFSPKWNFTFLLIQVPELALIRFVVETQQGLLSGNELLGQYTLPVLCMKNKGYRRVPLFSKSG
 ANLEPSSLIYVWYFRE

TRTRPLE – GFP Tag – V

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_054066

ORF Size: 1941 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_054066.4](#), [NP_473407.2](#)

RefSeq Size: 2182 bp

RefSeq ORF: 1944 bp

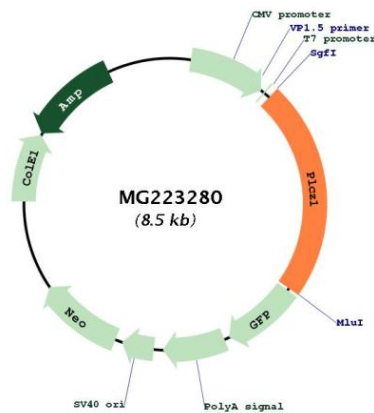
Locus ID: 114875

UniProt ID: [Q8K4D7](#)

Cytogenetics: 6 G2

Gene Summary: The production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) is mediated by activated phosphatidylinositol-specific phospholipase C enzymes. In vitro, hydrolyzes PtdIns(4,5)P2 in a Ca(2+)-dependent manner. Triggers intracellular Ca(2+) oscillations in oocytes solely during M phase and is involved in inducing oocyte activation and initiating embryonic development up to the blastocyst stage. Is therefore a strong candidate for the egg-activating soluble sperm factor that is transferred from the sperm into the egg cytoplasm following gamete membrane fusion. May exert an inhibitory effect on phospholipase-C-coupled processes that depend on calcium ions and protein kinase C, including CFTR trafficking and function.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG223280