

Product datasheet for **MC211450**

Dppa3 (NM_139218) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dppa3 (NM_139218) Mouse Untagged Clone
Tag: Tag Free
Symbol: Dppa3
Synonyms: 2410075G02Rik; PCG7; PGC7; Stella
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC211450 representing NM_139218
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGAGGAACCATCAGAGAAAGTCGACCCAATGAAGGACCCTGAACTCCTCAGAAGAAAGATGAAGAGG
ACGCTTTGGATGATACAGACGTCTACAACCAGAACTAGTAAAGGTCATGAAAAAGCTAACCCCTAAA
CCCCGGTGTCAAGCGGTCCGCACGCCGGCGCAGTCTACGGAACCGCATTGCAGCCGTACCTGTGGAGAAC
AAGAGTAAAAAATCCGGAGGGAAGTTCAAAGCGCCTTTCCAAGAGAAGGGTCCGCACTTTGTTGTCGG
TGCTGAAAGACCCATAGCAAAGATGAGAAGACTTGTTCCGGATTGAGCAGAGACAAAAAGGCTCGAAGG
AAATGAGTTTGAACGGGACAGTGAGCCATTAGATGTCTCTGCACCTTTCTGCCATTATCAAAGATGGGAT
CCCTCTGAGAATGCGAAAATCGGGAAGAAT**AG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI
ACCN: NM_139218
Insert Size: 453 bp



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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](#)

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_139218.1](#), [NP_631964.1](#)

RefSeq Size: 818 bp

RefSeq ORF: 453 bp

Locus ID: 73708

UniProt ID: [Q8QZY3](#)

Cytogenetics: 6 F1

Gene Summary: Primordial germ cell (PGCs)-specific protein involved in epigenetic chromatin reprogramming in the zygote following fertilization. In zygotes, DNA demethylation occurs selectively in the paternal pronucleus before the first cell division, while the adjacent maternal pronucleus and certain paternally-imprinted loci are protected from this process. Participates in protection of DNA methylation in the maternal pronucleus by preventing conversion of 5mC to 5hmC: specifically recognizes and binds histone H3 dimethylated at 'Lys-9' (H3K9me2) on maternal genome, and protects maternal genome from TET3-mediated conversion to 5hmC and subsequent DNA demethylation. Does not bind paternal chromatin, which is mainly packed into protamine and does not contain much H3K9me2 mark. Also protects imprinted loci that are marked with H3K9me2 in mature sperm from DNA demethylation in early embryogenesis. May be important for the totipotent/pluripotent states continuing through preimplantation development. Also involved in chromatin condensation in oocytogenesis. [UniProtKB/Swiss-Prot Function]