

Product datasheet for RN204825

Dppa3 (NM 001047864) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Dppa3 (NM_001047864) Rat Untagged Clone

Tag:Tag FreeSymbol:Dppa3

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >RN204825 representing NM_001047864

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGACGAGCCATCCGAGAAAGTCGACCCAGTCGTGAACCCAGAAACTCAGATGTATGATGGATCTCAGA GGGAAGATGAAGGGACTCACCGGATGATTCAGAAACACAGAAGCACAGAAACACACAGAAACACTAGTAAAGGTCATGAA AAAGCTAACCCTGAACCCCAGTGCCAAGCCGACAAAATATCATCGTCGTCAAAGGGTTCGTCTCCAGGTT AAGAGCCAGCCTGTGGAGAACAGAAGTGAAAGAATCATGAGGGAAGTTCAAAGCGCCTTTCCCAGGAGAA GGGTCCGCACTCTGTTGTCCGTGCTGAAAGACCCCATAGCAAGGATGAGAAGATTTGTTCGGATTGAGCA GAGACAAAGACAGCTTGAAGGAAATGAGAGACGAGATGAGCCATTCAGATGTCTCTGCACTTTCTGCCAT

TATCAGAGATGGGATCCTTCTGAGAATGCTAAAATCGGGCAGAACCAGAAGAAT<mark>TAG</mark>

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_001047864

Insert Size: 477 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



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: <u>NM 001047864.1, NP 001041329.1</u>

RefSeq Size: 708 bp
RefSeq ORF: 477 bp
Locus ID: 297576
UniProt ID: Q6IMK0
Cytogenetics: 4q42

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 (By similarity).[UniProtKB/Swiss-Prot Function]