

## **Product datasheet for RC218741L3**

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OriGene Technologies, Inc.

### DMP1 (NM\_004407) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** DMP1 (NM\_004407) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: DMP1

Synonyms: ARHP; ARHR; DMP-1

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

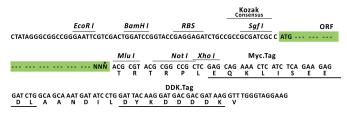
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC218741).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_004407

ORF Size: 1539 bp





#### DMP1 (NM\_004407) Human Tagged Lenti ORF Clone - RC218741L3

**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:** <u>NM 004407.1</u>

 RefSeq Size:
 2682 bp

 RefSeq ORF:
 1542 bp

 Locus ID:
 1758

UniProt ID: Q13316

Cytogenetics: 4q22.1

**Protein Families:** Secreted Protein

**MW:** 55.78 kDa

**Gene Summary:** Dentin matrix acidic phosphoprotein is an extracellular matrix protein and a member of the

small integrin binding ligand N-linked glycoprotein family. This protein, which is critical for proper mineralization of bone and dentin, is present in diverse cells of bone and tooth tissues. The protein contains a large number of acidic domains, multiple phosphorylation sites, a functional arg-gly-asp cell attachment sequence, and a DNA binding domain. In undifferentiated osteoblasts it is primarily a nuclear protein that regulates the expression of osteoblast-specific genes. During osteoblast maturation the protein becomes phosphorylated

and is exported to the extracellular matrix, where it orchestrates mineralized matrix

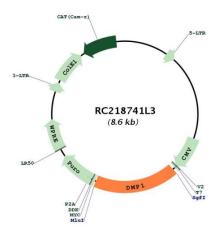
formation. Mutations in the gene are known to cause autosomal recessive

hypophosphatemia, a disease that manifests as rickets and osteomalacia. The gene structure is conserved in mammals. Two transcript variants encoding different isoforms have been

described for this gene. [provided by RefSeq, Jul 2008]



# **Product images:**



Circular map for RC218741L3