

## Datasheet for ABIN7318398

### DMP1 Protein (His tag)

[Go to Product page](#)

#### Overview

Quantity:	50 µg
Target:	DMP1 (DMTF1)
Origin:	Human
Source:	Human Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DMP1 protein is labelled with His tag.

#### Product Details

Purpose:	Recombinant Human DMP1 Protein (His Tag)
Sequence:	Lys17-Tyr513
Characteristics:	Recombinant Human Dentin matrix protein 1 is produced by our Mammalian expression system and the target gene encoding Lys17-Tyr513 is expressed with a 6His tag at the C-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

#### Target Details

Target:	DMP1 (DMTF1)
Alternative Name:	DMP1 ( <a href="#">DMTF1 Products</a> )
Background:	Background: Dentin Matrix Acidic Phosphoprotein 1 (DMP-1) is an extracellular matrix protein and a member of the small integrin binding ligand N-linked glycoprotein family. DMP-1 is

## Target Details

expressed in teeth particularly in odontoblast, ameloblast, and cementoblast. DMP-1 is critical for proper mineralization of bone and dentin. DMP-1 may have a dual function during osteoblast differentiation. In the nucleus of undifferentiated osteoblasts, the unphosphorylated form of DMP-1 acts as a transcriptional component for activation of osteoblast-specific genes like osteocalcin. During the osteoblast to osteocyte transition phase, DMP-1 is phosphorylated and exported into the extracellular matrix, where it regulates nucleation of hydroxyapatite. DMP-1 mutations have also been shown to cause rickets hypophosphatemic autosomal recessive type 1 (ARHR1).

Synonym: Dentin Matrix Acidic Phosphoprotein 1, DMP-1, Dentin Matrix Protein 1, DMP1,ARHP,ARHR

Molecular Weight: 55.0 kDa

UniProt: [Q13316](#)

## Application Details

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from a 0.2 µm filtered solution of 20 mM PB,150 mM NaCl, pH 7.4.

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.