

32-7757: Recombinant Human Dentin Matrix Acidic Phosphoprotein 1/DMP-1 (C-6His)(Discontinued)

Gene : DMP1
Gene ID : 1758
Uniprot ID : Q13316

Description

Source: Human Cells.

MW :55kD.

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. 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 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).

Product Info

Amount : 10 µg / 50 µg

Content : Lyophilized from a 0.2 µm filtered solution of 20mM PB,150mM NaCl,pH7.4.

Storage condition : Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.

Amino Acid : LPVTRYQNNESDSEEWKGHLAQAPTPPLESSESSESGKVSSEEQANEDPSDSTQSEEGLGSDDHQYIYRLAG
GFSRSTGKGGDDKDDDEDDSGDDTFGDDDSGPGPKDRQEGGNSRLGSDDESDDTIQASEESAPQGQDSAQ
DTTSESRELDNEDRVDSKPEGGDSTQESESEEHWVGGGSDGESSHGDGSELDDDEGMQSDDPESIRSERGNS
RMNSAGMKSKESGENSEQANTQDSGGSQLEHPSRKIFRKSRISEEDDRSELDDNNTMEEVKSDSTENSNSR
DTGLSQPRRDSKGDSDQEDSKENLSQEESQNVDPSSSESSQEANLSSQENSESESQEEVSESRGDNPDPTTSY
VEDQEDSDSSEEDSSHTLSHKSSESREEQADSESSESLNFSEESPESPEDENSSSQEGLQSHSSSAESQSEES
HSEEDSDSQDSSRSKEDSNSTESKSSSEEDGQLKNIEIESRKLTVDAYHNKPIGDQDDNDQCQDGYVDHHHH
HH

Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH₂O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Endotoxin : Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.