

DMP1 antibody

Catalog No: #38779

Package Size: #38779-1 50ul #38779-2 100ul

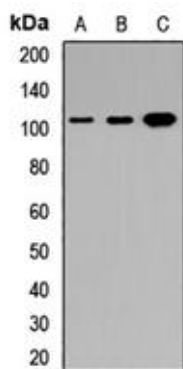
Description

Product Name	DMP1 antibody
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Affinity purification
Applications	WB,IHC
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of DMP1 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant fusion protein of human DMP1 (NP_004398.1).
Conjugates	Unconjugated
Target Name	DMP1
Other Names	DMP1;ARHP;ARHR;DMP-1
Accession No.	Uniprot:Q13316GeneID:1758
Calculated MW	Predicted band size: 54; 55 kD; Observed band size: 102 kD
SDS-PAGE MW	56kd
Concentration	1.0mg/ml
Formulation	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20°C. Avoid freeze / thaw cycles.

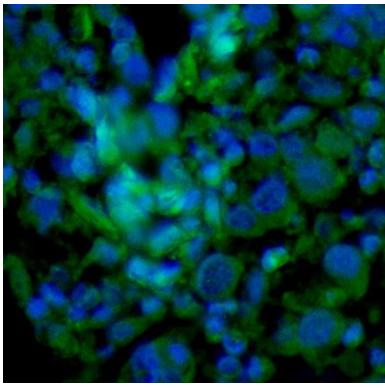
Application Details

WB 1/500 - 1/1000 IHC 1:50-1:100

Images



Western blot analysis of DMP1 expression in U251 (A), mouse brain (B), rat brain (C) whole cell lysates.



Immunohistochemical analysis of DMP1 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. Tyramide-AF488 (green) was used as the chromogen. The section was then counterstained with DAPI (blue).

Background

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.

Published Papers

el at., KPNB1-ATF4 induces BNIP3-dependent mitophagy to drive odontoblastic differentiation in dental pulp stem cells. In *Cell Mol Biol Lett* on 2024 Nov 27 by Zeying Zhang, Di Yang, et al.. PMID:39604846, , (2024)

[PMID:39604846](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.