

DMP1 Rabbit pAb

CatalogNo: YN0112 Orthogonal Validated 💽

Key Features

Host Species Reactivity Applications
• Rabbit • Human, Mouse, Rat • WB, ELISA

MW Isotype
• 56kD (Observed) • IgG

Recommended Dilution Ratios

WB 1:500-2000 ELISA 1:5000-20000

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Formulation Liquid in PBS containing 50% glycerol,0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality Polyclonal

Immunogen Information

Immunogen Synthesized peptide derived from human protein . at AA range: 430-510

Specificity DMP1 Polyclonal Antibody detects endogenous levels of protein.

| Target Information

Gene name DMP1

Protein Name

Dentin matrix acidic phosphoprotein 1 (DMP-1) (Dentin matrix protein 1)

Organism	Gene ID	UniProt ID
Human	<u>1758;</u>	<u>Q13316;</u>
Mouse		<u>055188;</u>
Rat		<u>P98193;</u>

Cellular Localization

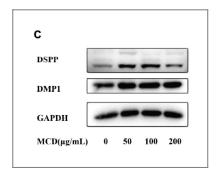
Nucleus . Cytoplasm . Secreted, extracellular space, extracellular matrix . In proliferating preosteoblasts it is nuclear, during early maturation stage is cytoplasmic and in mature osteoblast localizes in the mineralized matrix. Export from the nucleus of differentiating osteoblast is triggered by the release of calcium from intracellular stores followed by a massive influx of this pool of calcium into the nucleus.

Tissue specificity Expressed in tooth particularly in odontoblast, ameloblast and cementoblast.

Function

Disease: Defects in DMP1 are the cause of autosomal recessive hypophosphatemic rickets (ARHR) [MIM:241520]. ARHR is characterized by rickets, osteomalacia, elevated FGF23 serum levels and hypophosphatemia., Function: May have a dual function during osteoblast differentiation. In the nucleus of undifferentiated osteoblasts, unphosphorylated form acts as a transcriptional component for activation of osteoblast-specific genes like osteocalcin. During the osteoblast to osteocyte transition phase it is phosphorylated and exported into the extracellular matrix, where it regulates nucleation of hydroxyapatite.,PTM:Phosphorylated in the cytosol and extracellular matrix and unphosphorylated in the nucleus. Phosphorylation is necessary for nucleocytoplasmic transport and may be catalyzed by a nuclear isoform of CK2 and can be augmented by calcium., subcellular location: In proliferating preosteoblasts it is nuclear, during early maturation stage is cytoplasmic and in mature osteoblast localizes in the mineralizated matrix. Export from the nucleus of differentiating osteoblast is triggered by the release of calcium from intracellular stores followed by a massive influx of this pool of calcium into the nucleus., subunit: Interacts with importin alpha., tissue specificity: Expressed in tooth particularly in odontoblast, ameloblast and cementoblast.,

Validation Data



Metformin carbon nanodots promote odontoblastic differentiation of dental pulp stem cells by pathway of autophagy. Frontiers in Bioengineering and Biotechnology Yi Li WB Human

Contact information

Orders: order@immunoway.com Support: tech@immunoway.com

Telephone: 877-594-3616 (Toll Free), 408-747-0185

Website: http://www.immunoway.com

Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information: **DMP1 Rabbit pAb**

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents