

Datasheet for ABIN1713485
anti-DMP1 antibody (AA 221-320)[Go to Product page](#)

1 Publication

Overview

Quantity:	100 µL
Target:	DMP1 (DMTF1)
Binding Specificity:	AA 221-320
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This DMP1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin- embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunocytochemistry (ICC)

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human DMP1
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Purified by Protein A.

Target Details

Target:	DMP1 (DMTF1)
Alternative Name:	DMP1 (DMTF1 Products)

Target Details

Background:	<p>Synonyms: ARHP, ARHR, AV020965, Dentin matrix acidic phosphoprotein 1, Dentin matrix protein 1, DENTMAT, DMP 1, Dmp, MGC130441, PP, Serine rich acidic phosphoprotein, DMP1_HUMAN.</p> <p>Background: DMP-1 is a member of the small integrin ligand N-linked glycoprotein family. It is important for the mineralization of bone and dentin. DMP-1 is expressed in bone, tooth and hypertrophic cartilage. It is synthesized by preosteoblasts and contains a large number of acidic domains. DMP-1 localizes to the nucleus of undifferentiated osteoblasts where it functions as a transcriptional regulator for osteoblast-specific gene activation and induces osteoblast differentiation. During osteoblast maturation, DMP-1 undergoes a conformational change and becomes phosphorylated by casein kinase II in response to an influx of calcium ions to the nucleus. DMP-1 is then exported to the extracellular matrix (ECM) where it regulates the nucleation of hydroxyapatite and the formation of calcified tissue. DMP-1 is proteolytically processed into N- and C-terminal fragments in the ECM of bone and dentin. The protein has also been identified in bone as a high molecular weight proteoglycan comprised of the N-terminal DMP-1 fragment and chondroitin sulfate. The loss of DMP-1 can result in hypomineralized bone.</p>
Gene ID:	1758

Application Details

Application Notes:	<p>WB 1:300-5000</p> <p>ELISA 1:500-1000</p> <p>IHC-P 1:200-400</p> <p>IHC-F 1:100-500</p> <p>IF(IHC-P) 1:50-200</p> <p>IF(IHC-F) 1:50-200</p> <p>IF(ICC) 1:50-200</p> <p>ICC 1:100-500</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

Handling

Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

Product cited in: Zhan, Liu, Wang: "The Role of MicroRNA-143-5p in the Differentiation of Dental Pulp Stem Cells into Odontoblasts by Targeting Runx2 via the OPG/RANKL Signaling Pathway." in: **Journal of cellular biochemistry**, Vol. 119, Issue 1, pp. 536-546, (2018) ([PubMed](#)).