ARG43801
anti-DMP1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes DMP1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	DMP1
Species	Human
Immunogen	Recombinant protein corresponding to N-terminal of Human DMP1.
Conjugation	Un-conjugated
Alternate Names	DMP-1; Dentin matrix protein 1; ARHP; Dentin matrix acidic phosphoprotein 1; ARHR

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
WB	1:500 - 1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HeLa; Mouse Kidney; Rat liver
Observed Size	30 kDa

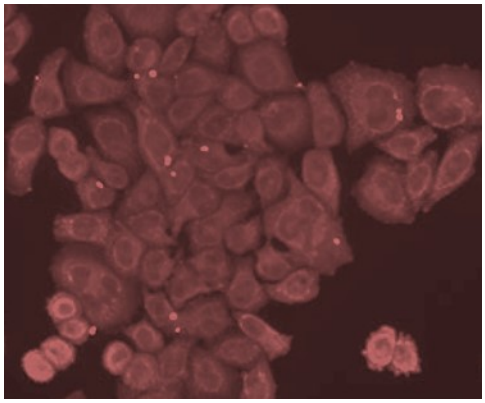
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	PBS with 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

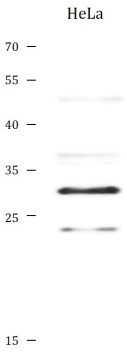
Gene Symbol	DMP1
Gene Full Name	dentin matrix acidic phosphoprotein 1
Background	Dentin matrix acidic phosphoprotein is an extracellular matrix protein and a member of the small integrin binding ligand N-linked glycoprotein family. This protein, which is critical for proper mineralization of bone and 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. [provided by RefSeq, Jul 2008]
Research Area	Developmental Biology antibody; Signaling Transduction antibody
Calculated Mw	30 kDa
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. Phosphorylated (in vitro) by FAM20C in the extracellular medium at sites within the S-x-E/pS motif.

Images



ARG43801 anti-DMP1 antibody ICC/IF image

Immunofluorescence: U2OS cells stained with ARG43801 anti-DMP1 antibody at 1:100 dilution.

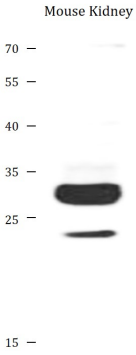


ARG43801 anti-DMP1 antibody WB image

Western Blot: HeLa cell lysate stained with ARG43801 anti-DMP1 antibody at 1:1000 dilution.

ARG43801 anti-DMP1 antibody WB image

Western Blot: Rat liver tissue lysate stained with ARG43801 anti-DMP1 antibody at 1:1000 dilution.



ARG43801 anti-DMP1 antibody WB image

Western Blot: Mouse kidneytissue lysate stained with ARG43801 anti-DMP1 antibody at 1:1000 dilution.