10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DSPP Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18118a

Product Information

Application	WB, FC, E
Primary Accession	Q9NZW4
Other Accession	NP_055023.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20942
Calculated MW	131151
Antigen Region	47-76

Additional Information

Gene ID	1834
Other Names	Dentin sialophosphoprotein, Dentin phosphoprotein, Dentin phosphophoryn, DPP, Dentin sialoprotein, DSP, DSPP
Target/Specificity	This DSPP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 47-76 amino acids of human DSPP.
Dilution	WB~~1:2000 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DSPP Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DSPP
Function	DSP may be an important factor in dentinogenesis. DPP may bind high amount of calcium and facilitate initial mineralization of dentin matrix collagen as well as regulate the size and shape of the crystals.

Cellular Location	Secreted, extracellular space, extracellular matrix
Tissue Location	Expressed in teeth. DPP is synthesized by odontoblast and transiently expressed by pre-ameloblasts

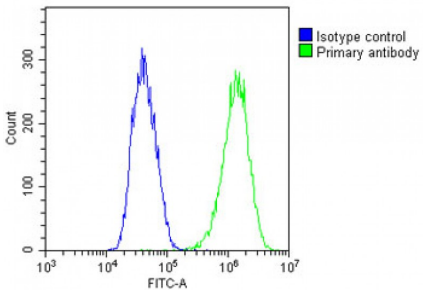
Background

This gene encodes two principal proteins of the dentin extracellular matrix of the tooth. The preproprotein is secreted by odontoblasts and cleaved into dentin sialoprotein and dentin phosphoprotein. Dentin phosphoprotein is thought to be involved in the biomineralization process of dentin. Mutations in this gene have been associated with dentinogenesis imperfecta-1; in some individuals, dentinogenesis imperfecta occurs in combination with an autosomal dominant form of deafness. Allelic differences due to repeat polymorphisms have been found for this gene. [provided by RefSeq].

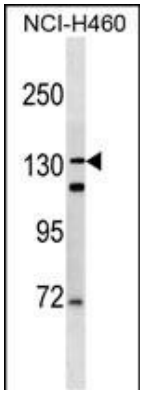
References

Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010)
Bai, H., et al. BMC Med. Genet. 11, 23 (2010) :
Kida, M., et al. Eur. J. Oral Sci. 117(6):691-694(2009)
Wheeler, H.E., et al. PLoS Genet. 5 (10), E1000685 (2009) :
Qu, E.J., et al. Zhonghua Yi Xue Yi Chuan Xue Za Zhi 26(5):536-538(2009)

Images



Overlay histogram showing PC-3 cells stained with AP18118a(green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



DSPP Antibody (N-term) (Cat. #AP18118a) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the DSPP antibody detected the DSPP protein (arrow).

Citations

- Effect of Polyhydroxybutyrate/Chitosan/Bioglass nanofiber scaffold on proliferation and differentiation of stem cells from human exfoliated deciduous teeth into odontoblast-like cells.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.