

#### DSPP Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18118a

#### Specification

#### **DSPP Antibody (N-term) - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB, FC,E <u>Q9NZW4</u> <u>NP\_055023.2</u> Human Rabbit Polyclonal Rabbit IgG 47-76

#### **DSPP** Antibody (N-term) - 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.

#### **DSPP Antibody (N-term) - 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

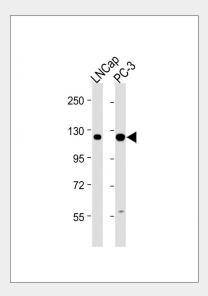
**Tissue Location** Expressed in teeth. DPP is synthesized by odontoblast and transiently expressed by pre-ameloblasts

## DSPP Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

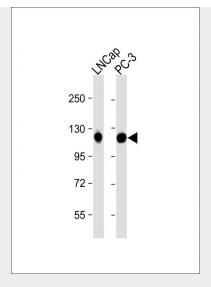
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### **DSPP Antibody (N-term) - Images**

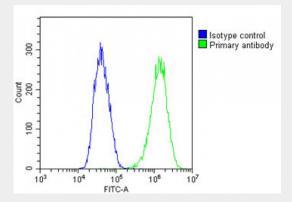


All lanes : Anti-DSPP Antibody (N-term) at 1:2000 dilution Lane 1: LNCap whole cell lysate Lane 2: PC-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 131 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





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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 37°C. 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 (1 $\mu$ g/1 $\times$ 10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

### DSPP Antibody (N-term) - 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].

# **DSPP Antibody (N-term) - 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) **DSPP Antibody (N-term) - Citations** 

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