



Rabbit Anti-DSPP antibody

SL8557R

Product Name:	DSPP
Chinese Name:	牙本质磷蛋白/牙本质骨唾液酸glycoprotein/牙本质骨唾液酸磷蛋白抗体
Alias:	Dentin phosphophoryn; Dentin phosphoprotein; dentin phosphoryn; Dentin sialophosphoprotein; Dentin sialophosphoprotein precursor; Dentin sialoprotein; dentinogenesis imperfecta 1; DFNA39; DGI1; DMP3; DPP; DSP; DSPP_HUMAN; DTDP2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	47/129kDa
Cellular localization:	Extracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Dentin sialoprotein:101-220/1301
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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, Jul 2008]

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.

Subunit:

Interacts with FBLN7.

Subcellular Location:

Secreted, extracellular space, extracellular matrix.

Tissue Specificity:

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

Post-translational modifications:

DSP is glycosylated.

DISEASE:

Defects in DSPP are the cause of deafness autosomal dominant type 39 with dentinogenesis imperfecta 1 (DFNA39/DGI1) [MIM:605594]. Affected individuals present DGI1 associated with early onset progressive sensorineural high-frequency hearing loss.

Defects in DSPP are the cause of dentinogenesis imperfecta type 1 (DGI1) [MIM:125490]; also known as dentinogenesis imperfecta Shields type 2 (DGI2). DGI1 is an autosomal dominant disorder in which both the primary and the permanent teeth are affected. It occurs with an incidence of 1:8000 live births. The teeth are amber and opalescent, the pulp chamber being obliterated by abnormal dentin. The enamel, although unaffected, tends to fracture, which makes dentin undergo rapid attrition, leading to shortening of the teeth.

Defects in DSPP are a cause of dentinogenesis imperfecta Shields type 3 (DGI3) [MIM:125500]. Patients with DGI3 do not have stigmata of osteogenesis imperfecta. The finding that a single defects in the DSPP gene causes both phenotypic patterns of DGI2 and DGI3 strongly supports the conclusion that these two disorders are not separate diseases but rather the phenotypic variation of a single genetic defect.

Defects in DSPP are the cause of dentin dysplasia type 2 (DTDP2) [MIM:125420]; also known as dentin dysplasia Shields type 2. DTDP2 is an autosomal dominant disorder in which mineralization of the dentine of the primary teeth is abnormal. On the basis of the phenotypic overlap between, and shared chromosomal location with DGI2 it has been proposed that DTDP2 and DGI2 are allelic. From the results of recent studies, it is clear that different types of mutations in DSPP lead to the two different phenotypes.

SWISS:
Q9NZW4

Gene ID:
1834

Database links:

[Entrez Gene: 1834](#)Human

[Oimim: 124585](#)Human

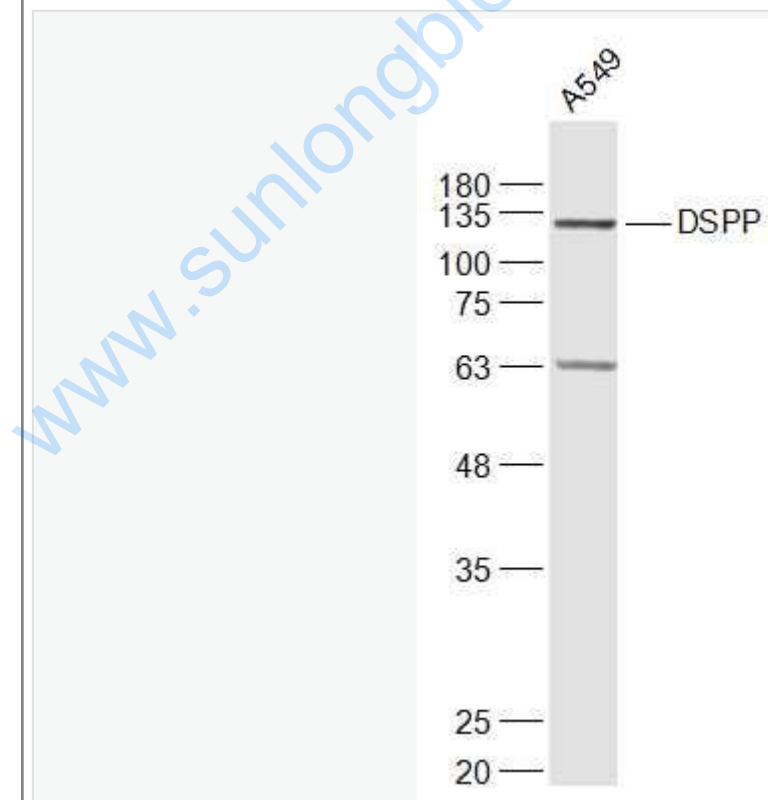
[SwissProt: Q9NZW4](#)Human

[Unigene: 678914](#)Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

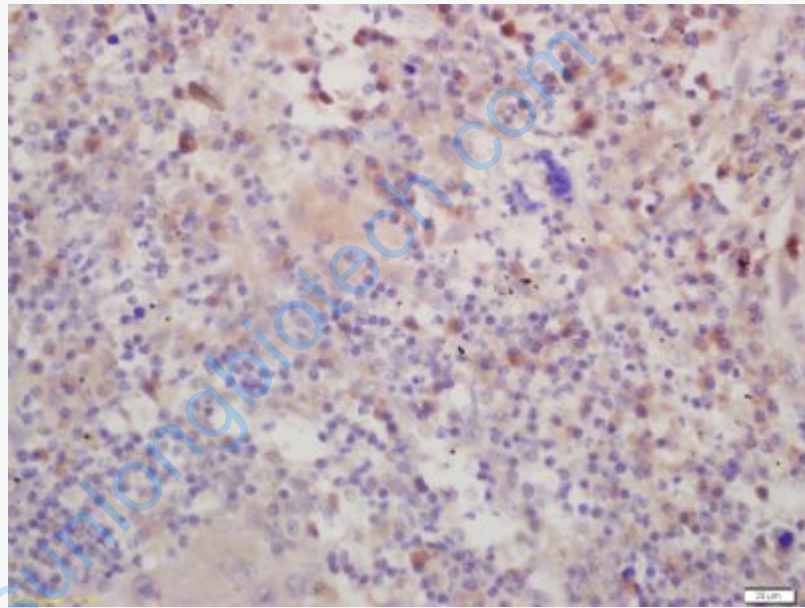
A549(Human) Cell Lysate at 30 ug

Primary: Anti-DSPP (SL8557R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 47/129 kD

Observed band size: 129 kD



Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-DSPP Polyclonal Antibody, Unconjugated(SL8557R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

