

**IBSP Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14114a**

**Specification**

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**IBSP Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P21815</a>
Other Accession	<a href="#">NP_004958.2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	35148
Antigen Region	70-99

**IBSP Antibody (N-term) - Additional Information**

**Gene ID** 3381

**Other Names**

Bone sialoprotein 2, Bone sialoprotein II, BSP II, Cell-binding sialoprotein, Integrin-binding sialoprotein, IBSP, BNSP

**Target/Specificity**

This IBSP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 70-99 amino acids from the N-terminal region of human IBSP.

**Dilution**

WB~~1:1000

**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**

IBSP Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**IBSP Antibody (N-term) - Protein Information**

**Name** IBSP

**Synonyms** BNSP

**Function** Binds tightly to hydroxyapatite (PubMed:[11459848](#)). Appears to form an integral part of the mineralized matrix (PubMed:[1818768](#)). Probably important to cell-matrix interaction (PubMed:[1818768](#)). Promotes adhesion and migration of various cells via the alpha-V/beta-3 integrin receptor (ITGAV:ITGB3) (PubMed:[10640428](#), PubMed:[11459848](#), PubMed:[24103036](#)).

#### Cellular Location

Secreted.

#### Tissue Location

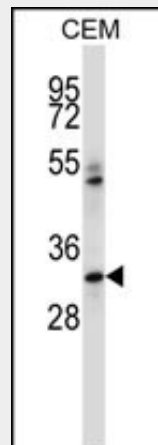
Expressed in bone (at protein level) (PubMed:11459848). Expressed in trophoblast cells of placenta (at protein level) (PubMed:1818768). Expressed in brain (PubMed:36261010)

### IBSP Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### IBSP Antibody (N-term) - Images



IBSP Antibody (N-term) (Cat. #AP14114a) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the IBSP antibody detected the IBSP protein (arrow).

### IBSP Antibody (N-term) - Background

The protein encoded by this gene is a major structural protein of the bone matrix. It constitutes approximately 12% of the noncollagenous proteins in human bone and is synthesized by skeletal-associated cell types, including hypertrophic chondrocytes, osteoblasts, osteocytes, and osteoclasts. The only extraskelatal site of its synthesis is the trophoblast. This protein binds to calcium and hydroxyapatite via its acidic amino acid clusters, and mediates cell attachment through an RGD sequence

that recognizes the vitronectin receptor.

#### **IBSP Antibody (N-term) - References**

Giroux, S., et al. Bone 47(5):975-981(2010)  
Koller, D.L., et al. J. Clin. Endocrinol. Metab. 95(4):1802-1809(2010)  
Yerges, L.M., et al. J. Bone Miner. Res. 24(12):2039-2049(2009)  
Gordon, J.A., et al. J. Cell. Biochem. 107(6):1118-1128(2009)  
Hwang, Q., et al. BMC Cancer 9, 121 (2009) :

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

- [CircRNA-vgll3 promotes osteogenic differentiation of adipose-derived mesenchymal stem cells via modulating miRNA-dependent integrin  \$\alpha\$ 5 expression.](#)
- [Targeting Local Osteogenic and Ancillary Cells by Mechanobiologically Optimized Magnesium Scaffolds for Orbital Bone Reconstruction in Canines.](#)