

**Anti-Bone SialoProtein Antibody**  
**Catalog # ABO10823****Specification**

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**Anti-Bone SialoProtein Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P21815</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Bone sialoprotein 2 (IBSP) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Bone SialoProtein Antibody - Additional Information**

**Gene ID** 3381

**Other Names**

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

**Calculated MW**

35148 MW KDa

**Application Details**

Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat  
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

**Subcellular Localization**

Secreted.

**Protein Name**

Bone sialoprotein 2

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human Bone Sialoprotein (17-34aa FSMKNLHRRVKIEDSEEN), different from the related rat and mouse sequences by three amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-Bone Sialoprotein Antibody - Protein Information**

**Name** IBSP

**Synonyms** BNSP

**Function**

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

**Cellular Location**

Secreted.

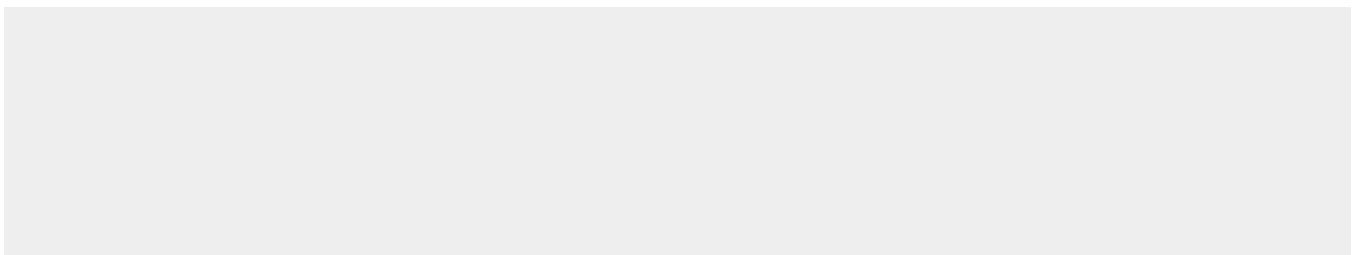
**Tissue Location**

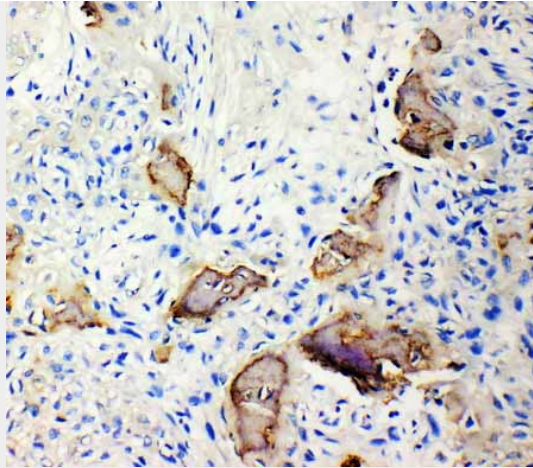
Expressed in bone (at protein level) (PubMed:11459848). Expressed in trophoblast cells of placenta (at protein level) (PubMed:1818768). Expressed in brain (PubMed:36261010)

**Anti-Bone Sialoprotein Antibody - 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](#)

**Anti-Bone Sialoprotein Antibody - Images**



Anti-Bone Sialoprotein antibody, ABO10823, IHC(P)IHC(P): Human Osteosarcoma Tissue

#### **Anti-Bone Sialoprotein Antibody - Background**

BSP is also known as IBSP(integrin-binding sialoprotein). The protein encoded by this gene is a major structural protein of the bone matrix. Bone sialoprotein is an acidic glycoprotein of approximately 70 kD that undergoes extensive posttranslational modifications. 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 extraskeletal 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. The BSP gene is mapped to 4q22.1.