

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

Anti-Bone SialoProtein Antibody - Product Information

Application	IHC
Primary Accession	P21815
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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg Na₃N.

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

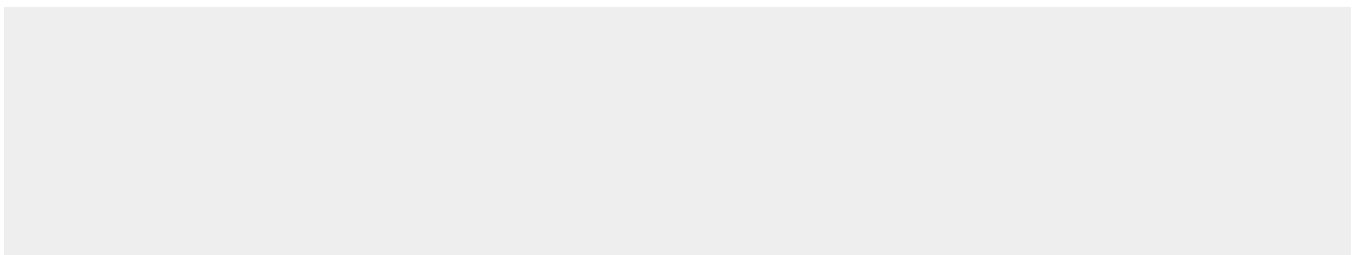
Expressed in bone (at protein level) (PubMed:11459848). Expressed in trophoblast cells of placenta (at protein level) (PubMed:1818768). Expressed in brain (PubMed:36261010)

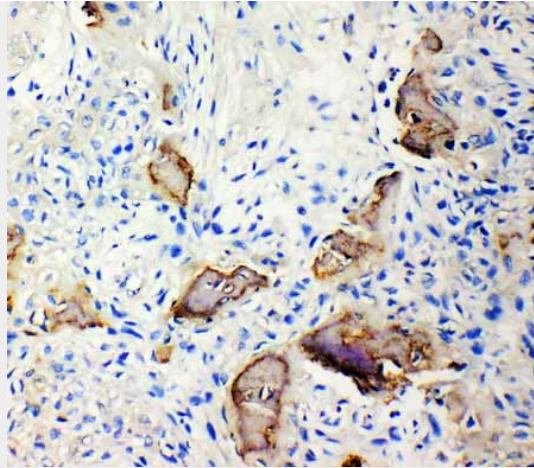
Anti-Bone SialoProtein Antibody - Protocols

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.