

## Anti-IBSP Antibody Picoband®

Catalog Number: A03183

### About IBSP

IBSP (integrin-binding sialoprotein) is also known as BSP. 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.

### Overview

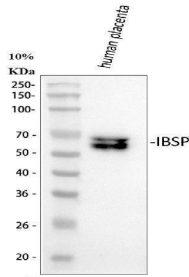
Product Name	Anti-IBSP Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-IBSP Antibody Picoband® catalog # A03183. Tested in WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P21815

### Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human IBSP, which shares 88.9% and 87% amino acid (aa) sequence identity with mouse and rat IBSP, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml

## Anti-IBSP Antibody Picoband® (A03183) Images



Western blot analysis of IBSP using anti-IBSP antibody (A03183). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human placenta tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-IBSP antigen affinity purified polyclonal antibody (Catalog # A03183) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for IBSP at approximately 65 kDa. The expected band size for IBSP is at 35 kDa.

## 3 Publications Citing This Product

1. PubMed ID: 30988819, Liu B,Xu M,Guo Z,Liu J,Chu X,Jiang H.Interleukin-8 promotes prostate cancer bone metastasis through upregulation of bone sialoprotein.Oncol Lett.2019 May;17(5):4607-4613.doi:10.3892/ol.2019.10138.Epub 2019 Mar 12.PMID:30988819;PMCID:PMC6447917.
2. PubMed ID: 24265840, The Osteogenic Potential of Mesoporous Bioglasses/Silk and Non-Mesoporous Bioglasses/Silk Scaffolds in Ovariectomized Rats: In vitro and In vivo Evaluation
3. PubMed ID: 27347083, Effect of kidney-reinforcing and marrow-beneficial Chinese medicine on bone metabolism-related factors following spinal cord injury in rats

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Anti-IBSP Antibody

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