

IBSP Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP14114a**Specification**

IBSP Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [P21815](#)**IBSP Antibody (N-term) Blocking peptide - 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

The synthetic peptide sequence used to generate the antibody AP14114a was selected from the N-term region of IBSP. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

IBSP Antibody (N-term) Blocking peptide - 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)

IBSP Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

IBSP Antibody (N-term) Blocking peptide - Images**IBSP Antibody (N-term) Blocking peptide - 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 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.

IBSP Antibody (N-term) Blocking peptide - 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) :