BACKGROUND
BSPII (bone sialoprotein II), also known as IBSP (integrin-binding sialoprotein), BSP (bone sialoprotein), BNSP or SP-II, is a secreted acidic glycosylated, sulfated and phosphorylated protein that is synthesized by osteoblasts, osteocytes, osteoclasts, hypertrophic chondrocytes and other skeletal-associated cell types. BSPII is a major structural protein in bone matrix and makes up approximately 12% of the non-collagenous proteins in human bone. Noncollagenous proteins are believed to function in the regulation of bone mineralization. BSPII is capable of nucleating hydroxyapatite crystal formation and, therefore, is thought to play an important role in initial mineralization of bone, cementum and dentin. Belonging to the SIBLING family of proteins, BSPII contains an RGD sequence which recognizes the Vitronectin receptor Integrin αV and may participate in mediating cell attachment. In addition, BSPII is expressed in various cancers, including lung, thyroid, breast and prostate cancers.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: IBSP (human) mapping to 4q22.1.

SOURCE
BSPII (ID1.2) is a mouse monoclonal antibody raised against bone sialoprotein isolated from bone tissue of human origin.

PRODUCT
Each vial contains 100 µg IgG1 in 1.0 ml TBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
BSPII (ID1.2) is recommended for detection of recombinant and native BSPII of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500); non cross-reactive with human Osteonectin or human Osteopontin.

SELECT PRODUCT CITATIONS

STORAGE
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE
For research use only, not for use in diagnostic procedures.

PROTOCOLS
See our web site at www.scbt.com for detailed protocols and support products.