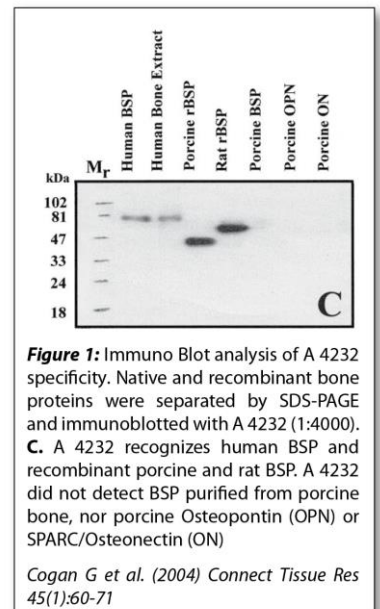


## Data Sheet

# HUMAN BONE SIALOPROTEIN (BSP)

## ANTIBODY, MONOCLONAL

<b>Catalog no.:</b>	A 4232.1 / A 4232.2
<b>Immunogen:</b>	Human Bone Sialoprotein (bone extract)
<b>Synonyms:</b>	Bone sialoprotein 2, BSP2, Cell-binding sialoprotein, Integrin-binding sialoprotein
<b>Swiss-Prot No:</b>	P21815
<b>Gene Information:</b>	Gene name: IBSP GeneID: 3381
<b>Host:</b>	Mouse Balb/c
<b>Clone no.:</b>	ID1.2
<b>Isotype:</b>	IgG <sub>1</sub>
<b>Matrix:</b>	Cell culture supernatant, Protein G purified, 50 mM TRIS pH 7.4
<b>Specificity:</b>	Epitope "DEYSY" (aa 279-283) of human Bone Sialoprotein; recombinant human, recombinant porcine and recombinant rat BSP, rabbit BSP  There was no cross reactivity obtained with human and porcine Osteonectin and Osteopontin
<b>Contents:</b>	10 µg / 100 µg (lyophilized)  Resuspend in 10 µl / 100 µl aqua bidest.
<b>Known applications:</b>	ELISA <sup>4</sup> , RIA, Western Blot (1:1000) <sup>2,3,4</sup> , immunohistochemistry (paraffin sections, 1:400-1:2000; cryosections; resin-embedded sections, 1:100) <sup>1,3,4,6,7,9,11</sup> , immunocytochemistry (1:100-1:200) <sup>4,5,8,10,12</sup>  This antibody has not been tested for use in all applications. This does not necessarily exclude its use in non-tested procedures. The stated dilutions are recommendations only. End users should determine optimal dilutions in their system using appropriate negative/positive controls.
<b>Store at:</b>	2-8 °C (lyophilized); - 20 °C (dissolved)  Repeated thawing and freezing must be avoided



## References:

1. Ibrahim T, Leong I, Sanchez-Sweatman O, Khokha R, Sodek J, Tenenbaum HC, Ganss B, Cheifetz S (2000). Expression of bone sialoprotein and osteopontin in breast cancer bone metastases. *Clin Exp Metastasis* **18**(3): 253-260.
2. Wuttke M, Muller S, Nitsche DP, Paulsson M, Hanisch FG, Maurer P (2001). Structural characterization of human recombinant and bone-derived bone sialoprotein. Functional implications for cell attachment and hydroxyapatite binding. *J Biol Chem* **276**(39): 36839-36848.
3. Carlinfante G, Vassiliou D, Svensson O, Wendel M, Heinegard D, Andersson G (2003). Differential expression of osteopontin and bone sialoprotein in bone metastasis of breast and prostate carcinoma. *Clin Exp Metastasis* **20**(5): 437-444.
4. Cogan G, Bansal AK, Ibrahim S, Zhu B, Goldberg HA, Ganss B, Cheifetz S, Armbruster FP, Sodek J (2004). Analysis of Human Bone Sialoprotein in Normal and Pathological Tissues using a Monoclonal Antibody (BSP 1.2 mab). *Connective Tissue Research* **45**(1): 60 – 71.
5. Hilbig H, Wiener T, Armbruster FP, Bekele A, Kirsten M, Graf HL (2005). Effects of dental implant surfaces on the expression of bone sialoprotein in cells derived from human mandibular bone. *Med Sci Monit* **11**(4): BR111-115.
6. Bauerle T, Adwan H, Kiessling F, Hilbig H, Armbruster FP, Berger MR (2005). Characterization of a rat model with site-specific bone metastasis induced by MDA-MB-231 breast cancer cells and its application to the effects of an antibody against bone sialoprotein. *Int J Cancer* **115**(2): 177-186.
7. Amir LR, Li G, Schoenmaker T, Everts V, Bronckers AL (2007). Effect of thrombin peptide 508 (TP508) on bone healing during distraction osteogenesis in rabbit tibia. *Cell Tissue Res* **330**(1): 35-44.
8. Hilbig H, Kirsten M, Rupiotta R, Graf HL, Thalhammer S, Strasser S, Armbruster FP (2007). Implant surface coatings with bone sialoprotein, collagen, and fibronectin and their effects on cells derived from human maxillar bone. *Eur J Med Res* **12**(1): 6-12.
9. Scherberich A, Galli R, Jaquiere C, Farhadi J, Martin I (2007). Three-dimensional perfusion culture of human adipose tissue-derived endothelial and osteoblastic progenitors generates osteogenic constructs with intrinsic vascularization capacity. *Stem Cells* **25**(7): 1823-1829.
10. Graf HL, Brueckner M, Troeger U, Hilbig H (2012). Proliferation, Apoptosis and Expression of Non-Collagenous Proteins: Differences between the Upper and the Lower Jaw Bone in vitro. *Cells Tissues Organs* **195**(3): 244-251.
11. Mittag F, Hennenlotter J, Minkley L, Ipach I, Schilling D, Scharpf M, Stenzl A, Leichtle U, Kluba T (2012). Alteration of bone sialoprotein expression in osseous metastasized renal cell carcinomas and the tumor surrounding tissue. *Clinical and Experimental Metastasis* **29**(2): 179-183.
12. Kalu erovic MR, Schreckenbach JP & Graf H-L (2016) Plasma-electrochemical deposition of porous zirconia on titanium-based dental material and in vitro interactions with primary osteoblasts cells. *J. Biomater. Appl.* **30**: 711–721.

**Last updated on:** 6 April 2022

**For research use only**

**Publishing research using A 4232? Please let us know so that we can cite your publication as a reference.**

