

bs-0470R**[Primary Antibody]****Osteocalcin Rabbit pAb****BioSS**
ANTIBODIES

www.bioss.com.cn

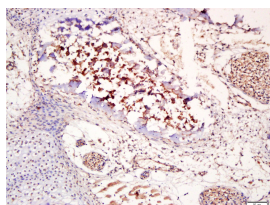
sales@bioss.com.cn

techsupport@bioss.com.cn

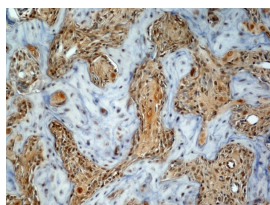
400-901-9800

— DATASHEET —

| | | |
|---|----------------------|---|
| Host: Rabbit | Isotype: IgG | Applications: IHC-P (1:100-500) |
| Clonality: Polyclonal | | IHC-F (1:100-500) |
| GeneID: 632 | SWISS: P02818 | IF (1:100-500) |
| Target: Osteocalcin | | Reactivity: Mouse (predicted: Human, Rat, Cow, Dog, Horse) |
| Immunogen: KLH conjugated synthetic peptide derived from human BGP: 21-80/100. | | |
| Purification: affinity purified by Protein A | | Predicted MW.: 11 kDa |
| Concentration: 1mg/ml | | Subcellular Location: Secreted |
| Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles. | | |
| Background: Osteocalcin belongs to the osteocalcin/matrix Gla protein family and constitutes 1 to 2% of the total bone protein. It is a 49 amino acid single chain vitamin K dependent protein, made by osteoblasts, and is a major component of the noncollagenous bone matrix. Post translational modification by a vitamin K dependent carboxylase produces three gamma carboxyglutamic acid residues at positions 17, 21 and 24, giving it a high affinity for calcium. It also binds strongly to apatite. | | |

— VALIDATION IMAGES —

Tissue/cell: bone of mouse embryo; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-Osteocalcin Polyclonal Antibody, Unconjugated (bs-0470R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody (SP-0023) and DAB (C-0010) staining



Generously provided by Markus Linder from Medical University Vienna as part of the Bioss Discovery Program. Formalin-fixed, paraffin embedded, and decalcified in EDTA mouse osteosarcoma labeled with Anti-Osteocalcin Polyclonal Antibody, Unconjugated (bs-0470R) at 1:100 followed by conjugation to the secondary antibody and DAB staining

— SELECTED CITATIONS —

- **[IF=16.744]** Jianxu Wei. et al. Switch-on mode of bioenergetic channels regulated by curcumin-loaded 3D composite scaffold to steer bone regeneration. CHEM ENG J. 2023 Jan;452:139165 IHC ;Rat. 10.1016/j.cej.2022.139165
- **[IF=15.304]** Xuan Li. et al. ROS-responsive hydrogel coating modified titanium promotes vascularization and osteointegration of bone defects by orchestrating immunomodulation. BIOMATERIALS. 2022 Aug;287:121683 IHC ;Rat. 35870263
- **[IF=12.822]** Lan Li. et al. Design of a Haversian system-like gradient porous scaffold based on triply periodic minimal surfaces for promoting bone regeneration. J ADV RES. 2023 Jan; WB ;Mouse. 36632888

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

- **[IF=13.3]** Fangyu Qiao. et al. Dual siRNA-Loaded Cell Membrane Functionalized Matrix Facilitates Bone Regeneration with Angiogenesis and Neurogenesis. SMALL. 2023 Oct;;2307062 IHC ;Rat. 37824284
- **[IF=11.322]** Zhenyin Chen. et al. Gelatin/sodium alginate composite hydrogel with dynamic matrix stiffening ability for bone regeneration. COMPOS PART B-ENG. 2022 Aug;243:110162 IHC ;Rat. 10.1016/j.compositesb.2022.110162