

bs-4917R**[Primary Antibody]****Osteocalcin Rabbit pAb****Bioss**
ANTIBODIES

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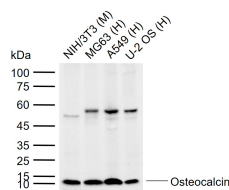
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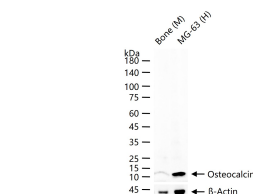
400-901-9800

DATASHEET**Host:** Rabbit**Isotype:** IgG**Clonality:** Polyclonal**GeneID:** 632**SWISS:** P02818**Target:** Osteocalcin**Immunogen:** KLH conjugated synthetic peptide derived from human Osteocalcin: 21-100/100.**Purification:** affinity purified by Protein A**Concentration:** 1mg/ml**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

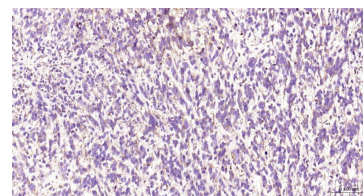
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

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.**Applications:** WB (1:500-2000)**IHC-P** (1:100-500)**IHC-F** (1:100-500)**IF** (1:100-500)**ELISA** (1:5000-10000)**Reactivity:** Human, Mouse, Rat**Predicted MW.:** 11 kDa**Subcellular Location:** Secreted**VALIDATION IMAGES**

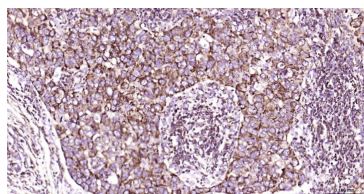
Sample: Lane 1: Mouse NIH/3T3 cell lysates Lane 2: Human MG63 cell lysates Lane 3: Human A549 cell lysates Lane 4: Human U-2 OS cell lysates
 Primary: Anti-Osteocalcin (bs-4917R) at 1/500 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 11 kDa Observed band size: 11 kDa



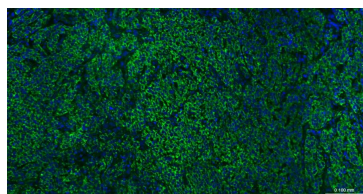
25 ug total protein per lane of various lysates (see on figure) probed with Osteocalcin polyclonal antibody, unconjugated (bs-4917R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



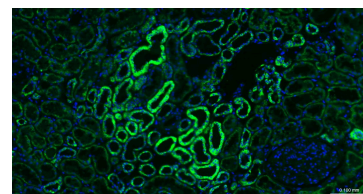
Paraformaldehyde-fixed, paraffin embedded Human Ewing's sarcoma; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with Osteocalcin Polyclonal Antibody, Unconjugated (bs-4917R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Breast Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with Osteocalcin Polyclonal Antibody, Unconjugated (bs-4917R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Ovarian Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with Osteocalcin Polyclonal Antibody, Unconjugated (bs-4917R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (green, bs-0295G-BF488), DAPI (blue, C02-04002) was used to stain the cell nuclei.



Paraformaldehyde-fixed, paraffin embedded Human Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with Osteocalcin Polyclonal Antibody, Unconjugated (bs-4917R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (green, bs-0295G-BF488), DAPI (blue, C02-04002) was used to stain the cell nuclei.

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

— SELECTED CITATIONS —

- **[IF=19]** Jia Song. et al. Manipulation of Surface Electrical Charge on Nanocomposite Membranes Confers Wide Spectrum Bactericidal Effects and Promotes Tissue Regeneration. ADV FUNCT MATER. 2024 Feb;;2314024 IF ;Mouse. 10.1002/adfm.202314024
- **[IF=17.6]** Qingyun Fu. et al. Polydopamine-modified metal-organic frameworks nanoparticles enhance the corrosion resistance and bioactivity of polycaprolactone coating on high-purity magnesium. J MAGNES ALLOY. 2024 Feb;; IHC ;Rabbit. 10.1016/j.jma.2023.12.014
- **[IF=17.2]** Chen Renjie. et al. Bioactive Glass-Reinforced Hybrid Microfibrous Spheres Promote Bone Defect Repair via Stem Cell Delivery. ADV FIBER MATER. 2024 Sep;;1-14 IHC ;Rat. 10.1007/s42765-024-00481-x
- **[IF=17.1]** Lu Tan. et al. Mechanically Robust Hemostatic Hydrogel Membranes with Programmable Strain-Adaptive Microdomain Entanglement for Wound Treatment in Dynamic Tissues. ACS NANO. 2024;XXXX(XXX):XXX-XXX IHC ;Rat. 38457334
- **[IF=14.9]** Jin Yizhou. et al. METTL7A-mediated m6A modification of corin reverses bisphosphonates-impaired osteogenic differentiation of orofacial BMSCs. INT J ORAL SCI. 2024 May;16(1):1-11 IHC,WB ;Mouse. 38782892