

## Osteocalcin Rabbit pAb

Catalog Number: bs-4917R

Target Protein: Osteocalcin

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

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 (predicted:Rat)

Predicted MW: 11 kDa

Entrez Gene: 632

Swiss Prot: P02818

Source: KLH conjugated synthetic peptide derived from human Osteocalcin: 21-100/100.

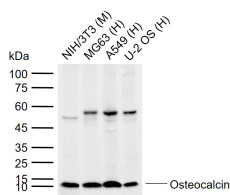
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

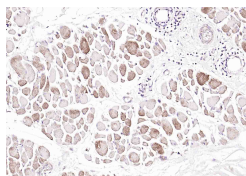
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**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.

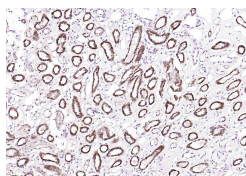
### VALIDATION IMAGES



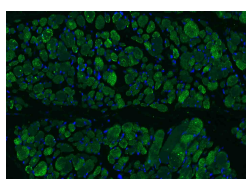
Sample: Lane 1: Mouse NIH/3T3 cell lysates Lane 2: Human MG63 cell lysates Lane 3: Human A549 cell lysates Lane 4: Human U-2 OS cell lysates Primary: Anti-Osteocalcin (bs-4917R) at 1/500 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 11 kDa Observed band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



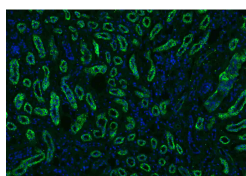
Paraformaldehyde-fixed, paraffin embedded (human skeletal muscle); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (Osteocalcin) Polyclonal Antibody, Unconjugated (bs-4917R) at 1:100 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (Osteocalcin) Polyclonal Antibody, Unconjugated (bs-4917R) at 1:100 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human skeletal muscle); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (Osteocalcin) Polyclonal Antibody, Unconjugated (bs-4917R) at 1:100 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (bs-0295G-AF488) for 90 minutes, and DAPI for nuclei stainin



Paraformaldehyde-fixed, paraffin embedded (human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (Osteocalcin) Polyclonal Antibody, Unconjugated (bs-4917R) at 1:100 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (bs-0295G-AF488) for 90 minutes, and DAPI for nuclei staining.

## PRODUCT SPECIFIC PUBLICATIONS

**[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