

**bsm-43106M****[ Primary Antibody ]****Bioss**  
ANTIBODIES

www.bioss.com.cn

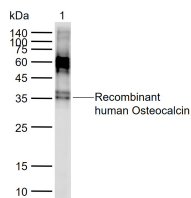
sales@bioss.com.cn

techsupport@bioss.com.cn

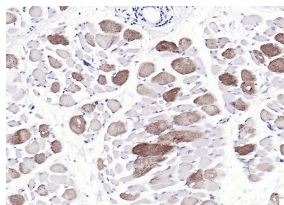
400-901-9800

**Osteocalcin Mouse mAb****DATASHEET**

<b>Host:</b> Mouse	<b>Isotype:</b> IgG	<b>Applications:</b> <b>WB</b> (1:500-2000) <b>IHC-P</b> (1:100-500) <b>IHC-F</b> (1:400-800) <b>IF</b> (1:100-500)  <b>Reactivity:</b> Human    <b>Predicted MW.:</b> 11 kDa  <b>Subcellular Location:</b> Secreted
<b>Clonality:</b> Monoclonal	<b>CloneNo.:</b> 2F10	
<b>GeneID:</b> 632	<b>SWISS:</b> P02818	
<b>Target:</b> Osteocalcin		
<b>Immunogen:</b> Recombinant human Osteocalcin protein: 24-100/100.		
<b>Purification:</b> affinity purified by Protein A		
<b>Storage:</b> Size : 50ul/100ul/200ul 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Size : 200ug (PBS only) 0.01M PBS Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.		
<b>Background:</b> 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: Recombinant human Osteocalcin, C-hFc (HEK293)( bsm-43106P)  
Primary: Anti-Osteocalcin (bsm-43106M) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution Predicted band size: 11 kDa Observed band size: 35.5 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; Antibody incubation with (Osteocalcin) Monoclonal Antibody, Unconjugated (bsm-43106M) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.

**SELECTED CITATIONS**

- **[IF=6.2]** Wu Yun. et al. NOR1 promotes the osteoblastic differentiation of human periodontal ligament stem cells via TGF- $\beta$  signaling pathway. CELL MOL LIFE SCI. 2024 Dec;81(1):1-15 WB ;Human. 39120703
- **[IF=3.7]** Jiabin Song. et al. Negative Regulation of LINC01013 by METTL3 and YTHDF2 Enhances the Osteogenic Differentiation of Senescent Pre-Osteoblast Cells Induced by Hydrogen Peroxide. Advanced Biology. 2024 Mar;;2300642 WB,IHC ;Human. 38548669