

## Anti-Osteocalcin/BGLAP Antibody Picoband™

Catalog Number: PB9919

### About Bglap

Osteocalcin, also known as bone gamma-carboxyglutamic acid-containing protein (BGLAP), is a noncollagenous protein found in bone and dentin. In humans, the osteocalcin is encoded by the BGLAP gene. Its receptor is GPRC6A. It is mapped to 1q22. Osteocalcin may play a role in the body's metabolic regulation and is pro-osteoblastic, or bone-building. It acts as a hormone in the body, causing beta cells in the pancreas to release more insulin, and at the same time directing fat cells to release the hormone adiponectin, which increases sensitivity to insulin. Also, it may play a role in male fertility. And it is found that picomolar amounts of osteocalcin affected insulin secretion and beta-cell proliferation.

### Overview

Product Name	Anti-Osteocalcin/BGLAP Antibody Picoband™
Reactive Species	Mouse
Description	Boster Bio Anti-Osteocalcin/BGLAP Antibody Picoband™ catalog # PB9919. Tested in IHC applications. This antibody reacts with Mouse.
Application	IHC
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P86546

### Technical Details

Immunogen	E. coli-derived mouse Osteocalcin recombinant protein (Position: Y50-I95). Mouse Osteocalcin shares 69% and 68.9% amino acid (aa) sequence identity with human and rat Osteocalcin, respectively.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Mouse, By Heat</p>

## Anti-Osteocalcin/BGLAP Antibody Picoband™ (PB9919) Images

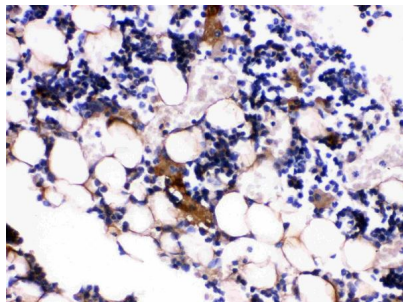


Figure 1. IHC analysis of Osteocalcin using anti-Osteocalcin antibody (PB9919).

Osteocalcin was detected in paraffin-embedded section of mouse tibia tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Osteocalcin Antibody (PB9919) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

## 8 Publications Citing This Product

1. PubMed ID: 10.1371/journal.pone.0181133, Role of glucocorticoid-induced leucine zipper (GILZ) in inflammatory bone loss
2. PubMed ID: 28771604, Role of glucocorticoid-induced leucine zipper (GILZ) in inflammatory bone loss
3. PubMed ID: 28791357, Synergistic effects of fibroblast growth factor-2 and bone morphogenetic protein-2 on bone induction

Visit [bosterbio.com/anti-osteocalcin-picoband-trade-antibody-pb9919-boster.html](https://bosterbio.com/anti-osteocalcin-picoband-trade-antibody-pb9919-boster.html) to see all 8 publications.

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