

Anti-Osteocalcin Picoband Antibody
Catalog # ABO12603**Specification**

Anti-Osteocalcin Picoband Antibody - Product Information

Application	IHC-P
Primary Accession	P02818
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Osteocalcin(BGLAP) detection. Tested with IHC-P in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Osteocalcin Picoband Antibody - Additional Information

Gene ID 632

Other Names

Osteocalcin, Bone Gla protein, BGP, Gamma-carboxyglutamic acid-containing protein, BGLAP

Calculated MW

10963 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Subcellular Localization

Secreted.

Protein Name

Osteocalcin

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

E. coli-derived human Osteocalcin recombinant protein (Position: Y52-V100). Human Osteocalcin shares 69% and 80.9% amino acid (aa) sequence identity with mouse and rat Osteocalcin, respectively.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-Osteocalcin Picoband Antibody - Protein Information**Name** BGLAP**Function**

Bone protein that constitutes 1-2% of the total bone protein, and which acts as a negative regulator of bone formation (PubMed: [3019668](http://www.uniprot.org/citations/3019668), PubMed: [6967872](http://www.uniprot.org/citations/6967872)). Functions to limit bone formation without impairing bone resorption or mineralization (By similarity). It binds strongly to apatite and calcium (PubMed: [6967872](http://www.uniprot.org/citations/6967872)).

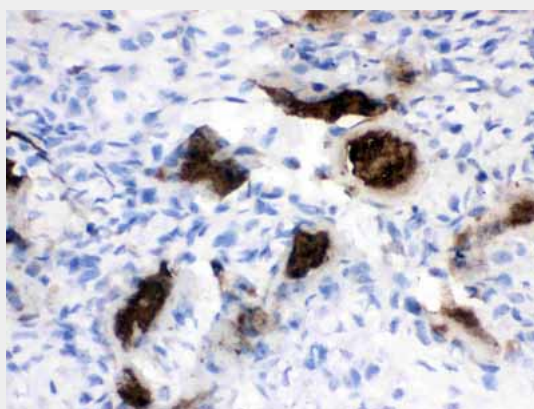
Cellular Location

Secreted.

Anti-Osteocalcin Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Osteocalcin Picoband Antibody - Images

Osteocalcin was detected in paraffin-embedded sections of human osteosarcoma tissues using rabbit anti-Osteocalcin Antigen Affinity purified polyclonal antibody (Catalog # ABO12603) at 1 µg/mL. The immunohistochemical section was developed using SABC method.

Anti-Osteocalcin Picoband Antibody - Background

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.