



## Osteocrin Human, Rabbit Polyclonal Antibody

### Product Data Sheet

**Source of Antigen:** *E.coli*

**Host:** Rabbit

**Cat. No.:**

RD181079100 (0.1 mg)

**Other names:** Musclin, OSTN

### Research topic

Bone and cartilage metabolism, Muscle growth control

### Preparation

The antibody was raised in rabbits by immunization with the recombinant Human Osteocrin.

### Amino Acid Sequence

The immunization antigen (13.6 kDa) is a protein containing 122 AA of recombinant Human Osteocrin. N-Terminal His-tag 16 AA (highlighted).

**MRGSHHHHHH GMASHM**VDTV TTEAFDSGVI DVQSTPTVRE EKSATDLTAK LLLLELVSL ENDVIETKKK RSFSGFGSPL  
DRLSAGSVDH KGKQRKVVDH PKRRFGIPMD RIGNRLSNS RG

### Species Reactivity

Human

Not yet tested in other species.

### Purification Method

Affinity chromatography on a column with immobilized recombinant Human Osteocrin.

### Antibody Content

0.1 mg (determined by BCA method, BSA was used as a standard)

### Formulation

The antibody is lyophilized in 0.05 M phosphate buffer, 0.1 M NaCl, pH 7.2. **AZIDE FREE.**

### Reconstitution

Add 0.1 ml of deionized water and let the lyophilized pellet dissolve completely. Slight turbidity may occur after reconstitution, which does not affect activity of the antibody. In this case clarify the solution by centrifugation.

### Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

### Storage/Stability

The lyophilized antibody remains stable and fully active until the expiry date when stored at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles and store frozen at -80°C. Reconstituted antibody can be stored at 4°C for a limited period of time; it does not show decline in activity after one week at 4°C.

### Expiration

See vial label.

### Lot Number

See vial label.

### Quality Control Test

Indirect ELISA - to determine titer of the antibody

SDS PAGE - to determine purity of the antibody

## **Applications**

Western blotting

## **Introduction to the Molecule**

Osteocrin is a recently identified secreted protein expression of which was only detected in bone, peaking just after birth and decreasing markedly with age. A 1280-bp mRNA encodes osteocrin producing a mature protein of 103 amino acids with a molecular mass of 11.4 kDa. In primary osteoblastic cell cultures osteocrin expression coincided with matrix formation then decreased in very mature cultures. Treatment of cultures with 1,25-dihydroxyvitamin D3 resulted in a rapid dose-dependent down-regulation of osteocrin expression, suggesting direct regulation. Chronic treatment of primary cultures with osteocrin-conditioned media inhibited mineralization and reduced osteocalcin and alkaline phosphatase expression. These results suggest that osteocrin represents a novel, unique vitamin D-regulated bone-specific protein that appears to act as a soluble osteoblast regulator.

## **Note**

This product is for research use only.

**Gentaur Molecular Products**  
**Voortstraat 49**  
**1910 Kampenhout, Belgium**  
**<http://www.gentaur-worldwide.com>**