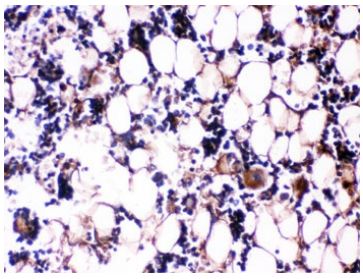
Osteocalcin Antibody (R32433)

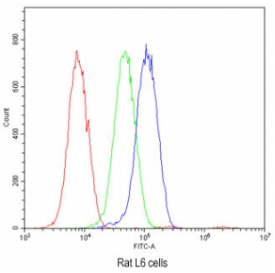
Catalog No.	Formulation	Size
R32433	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P04640
Localization	Cytoplasmic
Applications	IHC (FFPE) : 0.5-1ug/ml Flow Cytometry : 1-3ug/10^6 cells
Limitations	This Osteocalcin antibody is available for research use only.



IHC testing of FFPE rat bone tissue with Osteocalcin antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to testing.



Flow cytometry testing of rat L6 cells with Osteocalcin antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Osteocalcin antibody.

Description

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 cellsin 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.

Application Notes

Optimal dilution of the Osteocalcin antibody should be determined by the researcher.

Immunogen

Amino acids Y50-V99 of the rat protein were used as the immunogen for the Osteocalcin antibody.

Storage

After reconstitution, the Osteocalcin antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.