

Product datasheet

info@arigobio.com

ARG59341 anti-Osteocalcin antibody

Package: 50 μg Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes Osteocalcin

Tested Reactivity Rat

Tested Application FACS, IHC-P

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name Osteocalcin

Species Rat

Immunogen Recombinant protein corresponding to Y50-V99 of Rat Osteocalcin.

Conjugation Un-conjugated

Alternate Names OCN; Gamma-carboxyglutamic acid-containing protein; Osteocalcin; OC; Bone Gla protein; BGP

Application Instructions

Application table	Application	Dilution
	FACS	1 μg/10^6 cells
	IHC-P	0.5 - 1 μg/ml
Application Note	IHC-P: Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Affinity purification with immunogen.

Buffer 0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 5% BSA.

Preservative 0.05% Sodium azide

Stabilizer 5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol BGLAP

Gene Full Name bone gamma-carboxyglutamate (gla) protein

Background This gene encodes a highly abundant bone protein secreted by osteoblasts that regulates bone

remodeling and energy metabolism. The encoded protein contains a Gla (gamma carboxyglutamate) domain, which functions in binding to calcium and hydroxyapatite, the mineral component of bone. Serum osteocalcin levels may be negatively correlated with metabolic syndrome. Read-through transcription exists between this gene and the neighboring upstream gene, PMF1 (polyamine-modulated factor 1), but the encoded protein only shows sequence identity with the upstream gene

product. [provided by RefSeq, Jun 2015]

Function Constitutes 1-2% of the total bone protein. It binds strongly to apatite and calcium. [UniProt]

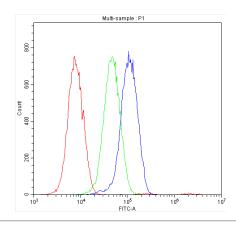
Calculated Mw 11 kDa

PTM Gamma-carboxyglutamate residues are formed by vitamin K dependent carboxylation. These residues

are essential for the binding of calcium. [UniProt]

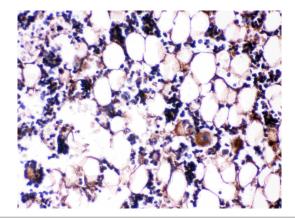
Cellular Localization Secreted. [UniProt]

Images



ARG59341 anti-Osteocalcin antibody FACS image

Flow Cytometry: L6 cells were blocked with 10% normal goat serum and then stained with ARG59341 anti-Osteocalcin antibody (blue) at 1 $\mu g/10^6$ cells for 30 min at 20°C, followed by DyLight®488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 $\mu g/10^6$ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



ARG59341 anti-Osteocalcin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat tibia tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59341 anti-Osteocalcin antibody at 1 ug/ml, overnight at 4°C.