

For Research Use Only

Osteocalcin Polyclonal antibody

Catalog Number: 23418-1-AP **89 Publications**



Basic Information

Catalog Number: 23418-1-AP	GenBank Accession Number: BC113432	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 800 µg/ml by Nanodrop and 187 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 632	Recommended Dilutions: IHC 1:50-1:500 IF 1:50-1:500
Source: Rabbit	Full Name: bone gamma-carboxylglutamate (gla) protein	
Isotype: IgG	Calculated MW: 100 aa, 11 kDa	
Immunogen Catalog Number: AG20065		

Applications

Tested Applications: IF, IHC, ELISA	Positive Controls: IHC : human osteosarcoma tissue, human testis tissue, mouse kidney tissue, mouse testis tissue, rat testis tissue
Cited Applications: IF, IHC	IF : NIH/3T3 cells,
Species Specificity: human, mouse, rat	
Cited Species: human, mouse, pig, rat	

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

Osteocalcin is a small, highly conserved molecule associated with mineralization of bone matrix. Osteocalcin is specifically expressed in osteoblasts and is the most abundant non-collagenous protein in bone. It regulates the dynamics of new bone formation and bone resorption by interaction with vitamin D, and by influencing the differentiation of osteoblasts. Osteocalcin is also involved in the posttranslational targeting of vitamin K-dependent gamma-carboxylation, which controls blood coagulation.

Notable Publications

Author	Pubmed ID	Journal	Application
Rupesh Kandel	34579527	ACS Appl Mater Interfaces	WB,IF
Guangchun Dai	33102476	Front Cell Dev Biol	IHC
Hong Wang	31556140	J Oral Rehabil	IHC

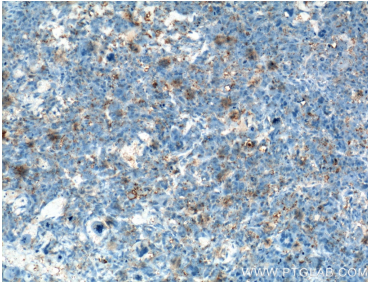
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

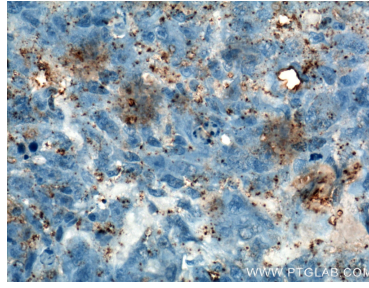
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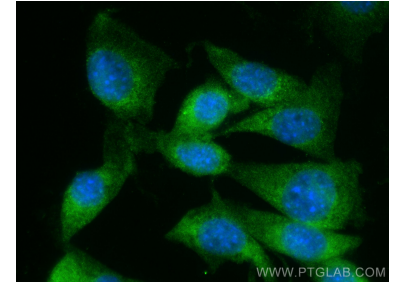
Selected Validation Data



Immunohistochemical analysis of paraffin-embedded human osteosarcoma tissue slide using 23418-1-AP (Osteocalcin Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human osteosarcoma tissue slide using 23418-1-AP (Osteocalcin Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using Osteocalcin antibody (23418-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).