

ARG54605 anti-Osteocalcin antibody [OC4-30]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [OC4-30] recognizes Osteocalcin
Tested Reactivity	Hu, Ms, Rat, Bov, Chk, Dog, Goat, Pig, Rb, Sheep
Tested Application	ELISA, ICC/IF, IHC-Fr, IHC-P, WB
Specificity	Includes the γ-carboxylated residue at position 17
Host	Mouse
Clonality	Monoclonal
Clone	OC4-30
Isotype	IgG2a
Target Name	Osteocalcin
Species	Bovine
Immunogen	Bovine osteocalcin
Conjugation	Un-conjugated
Alternate Names	OCN; Gamma-carboxyglutamic acid-containing protein; Osteocalcin; OC; Bone Gla protein; BGP

Application Instructions

Application Note	Sandwich ELISA: 1 - 10 µg/ml. Western blot: 1 - 10 µg/ml, reducing or non-reducing conditions. Immunohistochemistry: 1 - 10 µg/ml, paraffin-embedded or frozen tissue sections. Antigen retrieval: Proteinase K (0.4 mg/ml) at RT for 5 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
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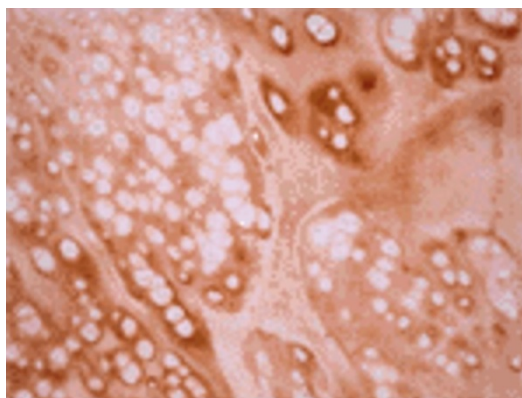
Properties

Form	Liquid
Buffer	10 mM PBS (pH 7.4) and 1% BSA
Stabilizer	1% BSA
Concentration	1 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

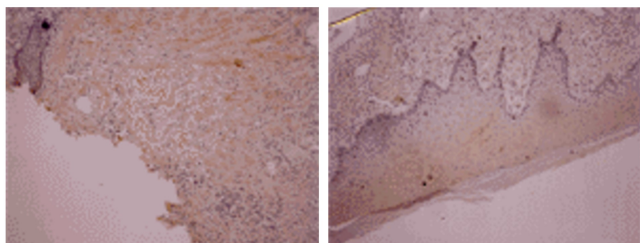
Gene Symbol	BGLAP
Gene Full Name	bone gamma-carboxyglutamate (gla) protein
Background	This gene encodes a highly abundant bone protein secreted by osteoblasts that regulates bone remodeling and energy metabolism. The encoded protein contains a Gla (gamma carboxyglutamate) domain, which functions in binding 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]
Research Area	Developmental Biology antibody; Signaling Transduction antibody
Calculated Mw	11 kDa
PTM	Gamma-carboxyglutamate residues are formed by vitamin K dependent carboxylation. These residues are essential for the binding of calcium.

Images



ARG54605 anti-Osteocalcin antibody [OC4-30] IHC-P image

Immunohistochemistry: Paraffin-embedded chondroma tissue stained with ARG54605 anti-Osteocalcin antibody [OC4-30] at 1:200 (10 µg/ml) dilution, RT for 60 min. Antigen retrieval: Proteinase K (0.4 mg/ml) at RT for 5 min.



ARG54605 anti-Osteocalcin antibody [OC4-30] IHC-P image

Immunohistochemistry: Paraffin-embedded synovial sarcoma tissue stained with ARG54605 anti-Osteocalcin antibody [OC4-30] at 1:200 (10 µg/ml) dilution, RT for 60 min. Antigen retrieval: Proteinase K (0.4 mg/ml) at RT for 5 min.