



Osteocalcin Mouse mAb

Catalog No	YP-mAb-19063
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	BGLAP
Immunogen	Synthesized peptide derived from part region of human protein AA range: 31-80
Specificity	OSTCN Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal,Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000; IF 1:100-300; ELISA 1:5000-20000; Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	BGLAP;BGP;Bone gamma carboxyglutamate (gla) protein;Bone gamma carboxyglutamate gla protein osteocalcin;Bone gamma carboxyglutamate protein;Bone Gla protein;Gamma carboxyglutamic acid containing protein; Gamma-carboxyglutamic acid-containing protein;OC;OCN;OSTCN_HUMAN; Osteocalcin;OTTHUMP16586;PMF1;Osteocalcin (Bone Gla protein) (BGP) (Gamma-carboxyglutamic acid-containing protein)
Observed Band	11kD
Calculated Molecular Weight	11 kDa; 11kD(Calculated).
Cell Pathway	Secreted.
Tissue Specificity	Brain,Cerebellum,Colon,Lung carcinoma,Skin,Testis,Uterus,
Function	Constitutes 1-2% of the total bone protein. It binds strongly to apatite and calcium.,Function:Part of the MIS12 complex which is required for normal chromosome alignment and segregation and kinetochore formation during mitosis. May act as a cotranscription partner of NFE2L2 involved in regulation of polyamine-induced transcription of SSAT.,induction:By polyamine analogs in analog-sensitive H157 cells.,online information:Osteocalcin entry,PTM:Gamma-carboxyglutamate residues are formed by vitamin K dependent carboxylation.



These residues are essential for the binding of calcium.,similarity:Belongs to the osteocalcin/matrix Gla protein family.,similarity:Contains 1 Gla (gamma-carboxy-glutamate) domain.,subcellular location:Associated with the kinetochore., subunit:Component of the MIS12 complex composed of MIS12, DSN1, NSL1 and PMF1. Interacts with COPS7A. Interacts via its coiled-coil domain with the leucine-zipper domain of NFE2L2. The interaction with NFE2L2 is required for the transcriptional regulation of SSAT.,tissue specificity:Highest levels of expression in heart and skeletal muscle, with significant levels expressed in kidney and liver.,

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],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images