



Rabbit Anti-Osteocalcin antibody

SL0470R

Product Name:	Osteocalcin
Chinese Name:	骨钙蛋白/骨钙素抗体
Alias:	Osteocalcin Propeptide; Osteocalcin; Osteocalcin precursor; Gamma-carboxyglutamic acid-containing protein; Bone Gla-protein; BGLAP; Bone gamma carboxyglutamate protein; BGLAP; BGP; Bone gamma carboxyglutamate gla protein osteocalcin; Bone gamma carboxyglutamate protein; Bone Gla protein; Gamma carboxyglutamic acid containing protein; OC; PMF1; OSTCN HUMAN.
文献引用 PubMed :	<p>Specific References(2) SL0470R has been referenced in 2 publications.</p> <p>[IF=3.68]Zhang, Ping, et al. WB;Rat.</p> <p>[IF=3.08]Zhan, Fu-Liang, Xin-Yang Liu, and Xing-Bo Wang. "The Role of MicroRNA-143-5p in the Differentiation of Dental Pulp Stem Cells into Odontoblasts by Targeting Runx2 via the OPG/RANKL Signaling Pathway." Journal of Cellular Biochemistry (2017).WB;Human.</p> <p style="text-align: right;">PubMed:28608628</p>
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	11kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human BGP:21-80/100

Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>Osteocalcin belongs to the osteocalcin/matrix Gla protein family and constitutes 1 to 2% of the total bone protein. It is a 49 amino acid single chain vitamin K dependent protein, made by osteoblasts, and is a major component of the noncollagenous bone matrix. Post translational modification by a vitamin K dependent carboxylase produces three gamma carboxyglutamic acid residues at positions 17, 21 and 24, giving it a high affinity for calcium. It also binds strongly to apatite.</p> <p>Function: Constitutes 1-2% of the total bone protein. It binds strongly to apatite and calcium.</p> <p>Subcellular Location: Secreted.</p> <p>Post-translational modifications: Gamma-carboxyglutamate residues are formed by vitamin K dependent carboxylation. These residues are essential for the binding of calcium.</p> <p>Similarity: Belongs to the osteocalcin/matrix Gla protein family. Contains 1 Gla (gamma-carboxy-glutamate) domain.</p> <p>SWISS: P02818</p> <p>Gene ID: 632</p> <p>Database links:</p> <p>Entrez Gene: 281646Cow</p> <p>Entrez Gene: 632Human</p> <p>Entrez Gene: 397530Pig</p> <p>Entrez Gene: 25295Rat</p>

[Omin: 112260](#)Human

[SwissProt: P02820](#)Cow

[SwissProt: P02818](#)Human

[SwissProt: Q8HYY9](#)Pig

[SwissProt: P04640](#)Rat

[Unigene: 654541](#)Human

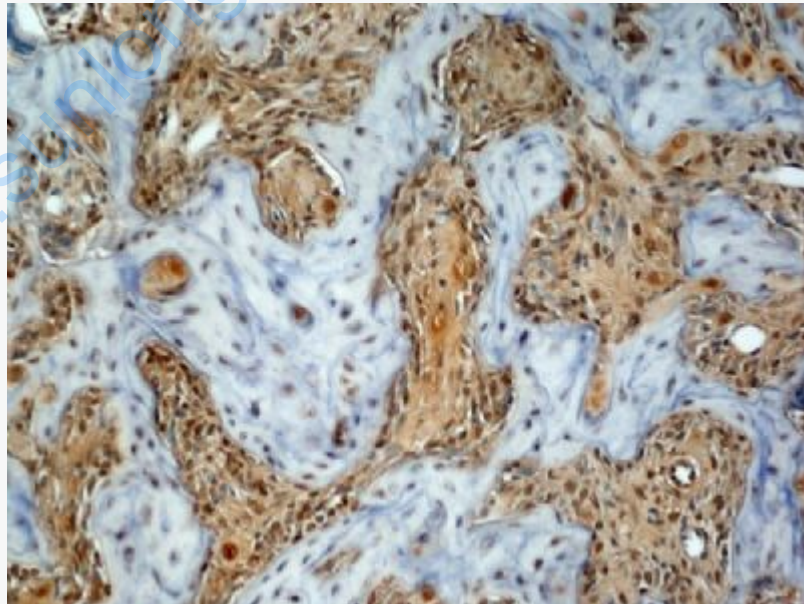
[Unigene: 9722](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

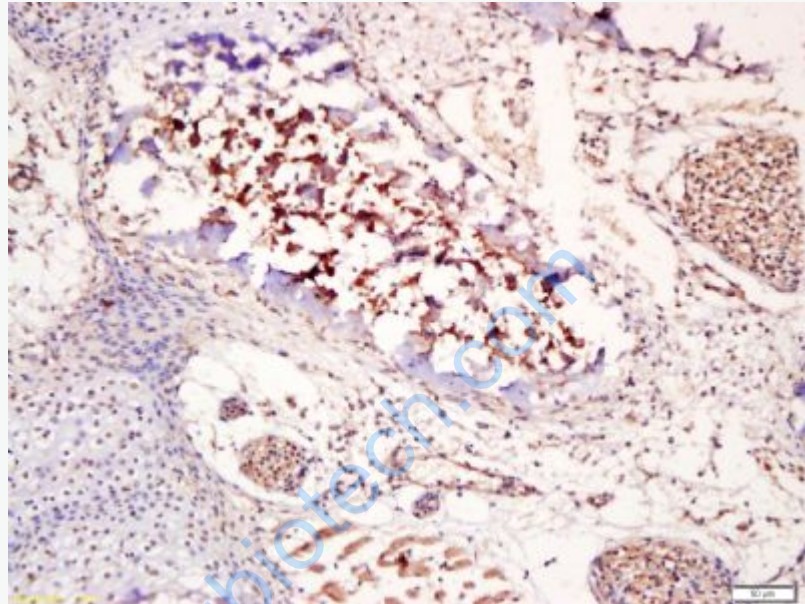
骨钙素又称骨 γ -羧谷氨酸包含蛋白

Picture:



Generously provided by Markus Linder from Medical University Vienna as part of the Bioss Discovery Program. Formalin-fixed, paraffin embedded, and decalcified in EDTA mouse osteosarcoma labeled with Anti-Osteocalcin Polyclonal Antibody,

Unconjugated (SL0470R) at 1:100 followed by conjugation to the secondary antibody and DAB staining



Tissue/cell: bone of mouse embryo; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Osteocalcin Polyclonal Antibody, Unconjugated(SL0470R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining