

Rabbit anti-Human Osteocalcin Polyclonal Antibody | anti-BGLAP antibody

Osteocalcin Antibody (N-term)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA284705	Rabbit	Human	Immunohistochemistry, ELISA, Western Blot

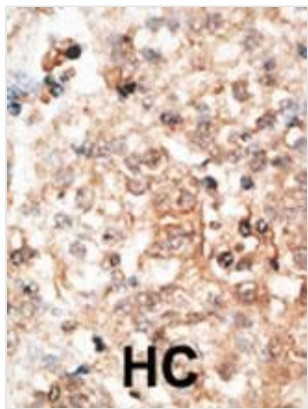
PRODUCT SYNONYMS

Osteocalcin; Polyclonal Antibody; Osteocalcin Antibody (N-term); Bone Gla protein; BGP; Gamma-carboxyglutamic acid-containing protein; BGLAP; anti-BGLAP antibody

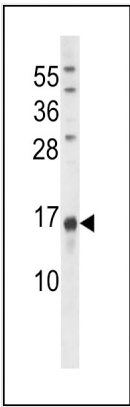
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This Osteocalcin antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 2-32 amino acids from the N-terminal region of human Osteocalcin.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Concentration	Vial Concentration: 2 (varies by lot)
Sequence Positions	2-32
Sequence Length	100
Applicable Applications for anti-BGLAP antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

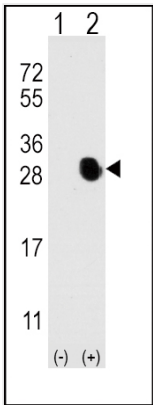
IMAGES



IHC (Immunohistochemisry)
Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



WB (Western Blot)
Osteocalcin Antibody (N-term) western blot analysis in U251 cell line lysates (35ug/lane). This demonstrates the Osteocalcin antibody detected the Osteocalcin protein (arrow).



WB (Western Blot)
Western blot analysis of Osteocalcin (arrow) using rabbit polyclonal Osteocalcin Antibody (N-term). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the BGLAP gene (Lane 2) (Origene Technologies).

ADDITIONAL INFORMATION

Related Product Information for anti-BGLAP antibody	Prior to the formation of calcified bone, noncollagenous proteins form in the extracellular bone matrix. Gamma-carboxyglutamic acid residues are formed by vitamin K, vitamin-D regulated calcium binding proteins containing residues of Gla. These residues are essential for the binding of calcium and constitute 1-2% of total bone protein. Osteocalcin itself binds strongly to apatite and calcium. Production of osteocalcin is expressed late in normal bone development and is characteristic of mature osteoblasts. Regular osteocalcin production has been shown to be linked to the p53 tumor suppressor gene. The p53 gene undergoes rearrangement in a high percentage of osteosarcomas, resulting in loss of its expression. The loss of p53 regulation inhibits further osteocalcin production. The absence of end-point differentiation in bone due to p53 rearrangements and lack of osteocalcin production may contribute to the maintenance of the tumorigenic phenotype in osteosarcomas.
Product Categories/Family for anti-BGLAP antibody	Signal Transduction
References	Yamada, Y., et al., J. Clin. Endocrinol. Metab. 88(7):3372-3378 (2003). Gronthos, S., et al., J. Bone Miner. Res. 18(4):716-722 (2003). Yousfi, M., et al., Biochem. Biophys. Res. Commun. 297(3):641-644 (2002). Willis, D.M., et al., J. Biol. Chem. 277(40):37280-37291 (2002). Viereck, V., et al., J. Cell. Biochem. 86(2):348-356 (2002).

NCBI AND UNIPROT INFORMATION

NCBI GI #	40316933
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NCBI GeneID	632
NCBI Accession #	NP_954642.1
NCBI GenBank Nucleotide #	NM_199173.5
UniProt Accession #	P02818; Q5TCK6
Molecular Weight	10963
NCBI Official Full Name	osteocalcin preproprotein
NCBI Official Synonym Full Names	bone gamma-carboxyglutamate (gla) protein
NCBI Official Symbol	BGLAP
NCBI Official Synonym Symbols	OC; BGP; OCN
NCBI Protein Information	osteocalcin
UniProt Protein Name	Osteocalcin
UniProt Gene Name	BGLAP
UniProt Synonym Gene Names	BGP
UniProt Entry Name	OSTCN_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/osteocalcin-antibody-immunohistochemistry-western-blot-elisa/284705>