

Datasheet for ABIN3030174
anti-Osteocalcin antibody (AA 2-32)

3 Images

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Overview

Quantity:	0.4 mL
Target:	Osteocalcin (BGLAP)
Binding Specificity:	AA 2-32
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Osteocalcin antibody is un-conjugated
Application:	ELISA, Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	A portion of amino acids 2-32 from the human protein was used as the immunogen for this Osteocalcin antibody.
Isotype:	Ig Fraction
Purification:	Purified

Target Details

Target:	Osteocalcin (BGLAP)
Alternative Name:	Osteocalcin (BGLAP Products)
Background:	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

Target Details

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.

UniProt: [P02818](#)

Application Details

Application Notes: Titration of the Osteocalcin antibody may be required due to differences in protocols and secondary/substrate sensitivity.\. Western blot: 1:1000,IHC (Paraffin): 1:50-1:100

Restrictions: For Research Use only

Handling

Format: Liquid

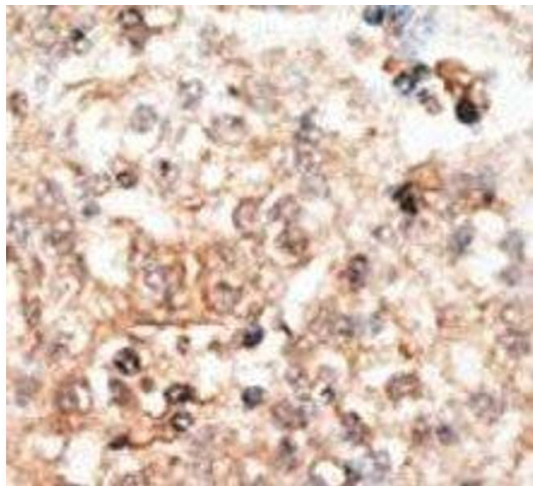
Buffer: In 1X PBS, pH 7.4, with 0.09 % sodium azide

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

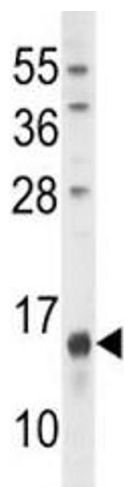
Storage: -20 °C

Storage Comment: Aliquot the Osteocalcin antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.



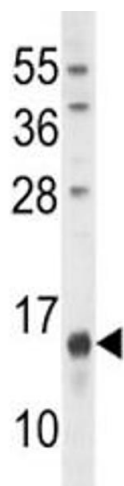
Immunohistochemistry

Image 1. IHC analysis of FFPE human hepatocarcinoma tissue stained with the Osteocalcin antibody



Western Blotting

Image 2. Osteocalcin antibody western blot analysis in U251 lysate. Predicted molecular weight: ~12 kDa



Western Blotting

Image 3. Osteocalcin antibody western blot analysis in U251 lysate. Predicted molecular weight: ~12 kDa