

Datasheet for ABIN357367

anti-Osteocalcin antibody (N-Term)

2 Images



Overview

| 0.0 | |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Quantity: | 0.4 mL |
| Target: | Osteocalcin (BGLAP) |
| Binding Specificity: | AA 9-39, N-Term |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This Osteocalcin antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Enzyme Immunoassay (EIA) |
| Product Details | |
| Immunogen: | Synthetic peptide KLH conjugated between 9~39 amino acids from the N-terminal region of Human Osteocalcin. |
| Isotype: | Ig Fraction |
| Specificity: | This antibody detects Osteocalcin at N-term. |
| Cross-Reactivity (Details): | Species reactivity (tested):Human. |
| Purification: | Protein G Chromatography, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS |
| Target Details | |
| Target: | Osteocalcin (BGLAP) |

Target Details

| 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 |
| | binding of calcium and constitue 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.Synonyms: BGLAP, Bone Gla protein, Gamma- |
| | carboxyglutamic acid-containing protein |
| Molecular Weight: | 10962 Da |
| Gene ID: | 632 |
| NCBI Accession: | NP_954642 |
| UniProt: | P02818 |
| Application Details | |
| Application Notes: | ELISA: 1/1,000. Western blot: 1/100-1/500. Immunohistochemistry: 1/50-1/100. |
| | Other applications not tested. |
| | Optimal dilutions are dependent on conditions and should be determined by the user. |
| Restrictions: | For Research Use only |
| Handling | |
| Format: | Liquid |
| Concentration: | 0.25 mg/mL |
| Buffer: | PBS with 0.09 % (W/V) Sodium Azide as preservative |
| Darrer. | |
| Preservative: | Sodium azide |

Handling

| Handling Advice: | Avoid repeated freezing and thawing. |
|------------------|--------------------------------------------------------------------------------------------|
| Storage: | 4 °C/-20 °C |
| Storage Comment: | Store the antibody undiluted at 2-8 °C for one month or (in aliquots) at-20 °C for longer. |

Images

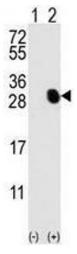


Image 1.

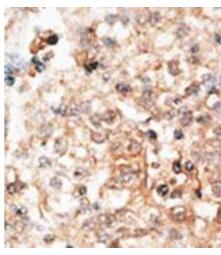


Image 2.