

Human OC Antibody Pair Set

Catalog No. E-KAB-0192 **Applications** ELISA
Synonyms BGLAP, OT, Bone Gamma-carboxyglutamate Protein, Bone Gla Protein

Kit components & Storage

| Title | Specifications | Storage |
|--------------------------------------|----------------|---|
| Human OC Capture Antibody | 1 vial, 100 µg | Store at -20°C. Avoid freeze/thaw cycles. |
| Human OC Detection Antibody (Biotin) | 1 vial, 50 µL | Store at -20°C. Avoid freeze/thaw cycles. |

Note: Centrifuge before opening to ensure complete recovery of vial contents.

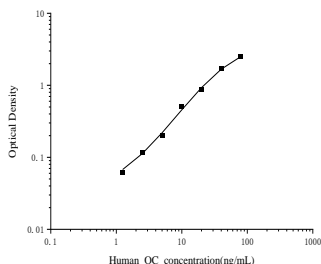
Product Information

| Items | | Characteristic (E-KAB-0192) | |
|-----------------------|---------------|--|---|
| | | Human OC Capture Antibody | Human OC Detection Antibody (Biotin) |
| Immunogen Information | Immunogen | Recombinant Human OC protein | Recombinant Human OC protein |
| | Swissprot | P02818 | |
| Product details | Reactivity | Human | Human |
| | Host | Mouse | Mouse |
| | Conjugation | Unconjugated | Biotin |
| | Concentration | 0.5 mg/mL | / |
| | Buffer | PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4 | PBS with 0.04% Proclin 300; 1% protective protein; 50% glycerol; pH 7.4 |
| | Purify | Protein A or G | Protein A or G |
| | Specificity | Detects Human OC in ELISAs. | |

For Research Use Only

Applications

Human OC Sandwich ELISA Assay

| | Recommended Concentration/Dilution | Reagent | Images |
|-----------------|------------------------------------|--------------------------------------|---|
| ELISA Capture | 0.5-4 µg/mL | Human OC Capture Antibody |  |
| ELISA Detection | 1:1000-1:10000 | Human OC Detection Antibody (Biotin) | |

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

Bone gamma-carboxyglutamic acid (Gla) protein, known as BGLAP, BGP or osteocalcin, is an abundant, non-collagenous protein component of bone that is produced by osteoblasts. In mice, osteocalcin is composed of a cluster of 3 genes known as OG1, OG2 and ORG, all of which can be found within a 23Kb span of genomic DNA. Human osteocalcin is a highly conserved, 46-50 amino acid, single chain protein that contains three vitamin K-dependent g-carboxyglutamic acid residues. Osteocalcin appears transiently in embryonic bone at the time of mineral deposition, where it binds to hydroxyapatite in a calcium-dependent manner.

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