



### Osteocalcin

Sold in the U.S. for **Research Use Only**. Not for use in diagnostic procedures.

The MicroVue Osteocalcin EIA provides a quantitative measure of intact osteocalcin (OC) in serum as a biochemical indicator of bone turnover.

#### Format

- ELISA
- 96-well microplate with reagents sufficient to test 40 samples in duplicate
- Sample type: Serum
- Controls: High, low included

#### Species Reactivity

- Rabbit, Pig, Sheep, Goat, Cow, Horse, Cynomolgus Macaque, Human
- Human cell cultures
- No recognition of Rat, Mouse, Dog

#### Specimen – Serum

- Serum, processed and frozen at  $\leq -20^{\circ}\text{C}$  within 4 hours of collection.
- Do not use collection tubes containing EDTA.

#### Assay Steps

- Add 25  $\mu\text{L}$  Standards, Controls, and Samples
- Add 125  $\mu\text{L}$  anti-Osteocalcin antibody
- Incubate 2 hours  $\pm$  10 minutes at  $20^{\circ}\text{C}$  to  $25^{\circ}\text{C}$
- Wash 3 times with 1X Wash Buffer
- Add 150  $\mu\text{L}$  reconstituted Enzyme Conjugate
- Incubate  $60 \pm 5$  minutes at  $20^{\circ}\text{C}$  to  $25^{\circ}\text{C}$
- Wash 3 times with 1X Wash Buffer
- Add 150  $\mu\text{L}$  Working Substrate Solution
- Incubate 35-40 minutes at  $20^{\circ}\text{C}$  to  $25^{\circ}\text{C}$
- Add 50  $\mu\text{L}$  Stop Solution
- Measure absorbance at 405 nm

#### Assay Performance

**Method:** ELISA

**Analyte:** Intact osteocalcin

**Specimen:** Serum

**Specimen Volume:** 25  $\mu\text{L}$

**Limit of Detection:** 0.45 ng/ $\mu\text{L}$

**Precision CVs (inter-assay):**  
4.8%-9.8%

**Precision CVs (intra-assay):**  
4.8%-10.0%

**Assay Time:** Approx. 3.6 Hours

**Specificity:** Intact OC 100%  
Reduced OC not detected  
N-, C- peptides not detected