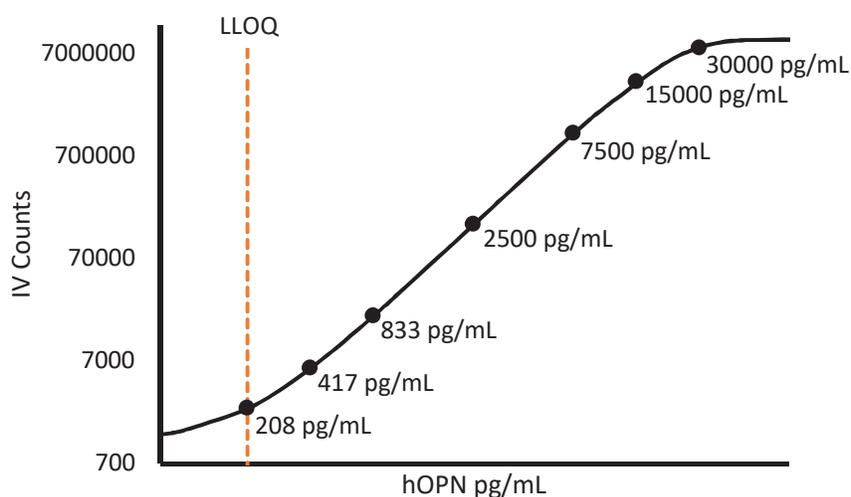


### Description – Osteopontin (OPN)

Osteopontin is a secreted molecule that belongs to a family of non-collagenous matricellular proteins. It functions as a ligand to  $\alpha v \beta 3$  integrin and possibly other receptors. It binds tightly to hydroxyapatite and can act as a structural component of the extracellular mineralized matrix. Osteopontin is initially secreted as a 298 amino acid protein, which is subject to multiple post-translational modifications including glycosylation, phosphorylation, and specific proteolytic cleavages into various smaller molecular weight fragments. Osteopontin is expressed in a wide range of cells and tissues including osteoblasts, various tumor cell lines, extraosseous cells in the inner ear, brain, kidney, deciduum, placenta and odontoblasts.

**Calibration Curve:** Calibrator concentrations and Lower Limit of Quantification are depicted in the figure below. This standard curve is for demonstration purposes; end users should prepare a standard curve for each assay run.



### Minimum Required Dilution (MRD)

Diluted Sample volume (1:25 Dilution)*	50 $\mu$ L per measurement
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\*See Kit Instructions for details

**Endogenous Serum and Plasma Readings:** Healthy EDTA plasma and serum samples (n=8) were measured.

% Above LOD	100%
% Above LLOQ	100%

**Assay Range:** The upper end of the dynamic range is equal to the top calibrator concentration multiplied by MRD.

Analytical LLOQ	208 pg/mL
Functional LLOQ (x MRD)	5200 pg/mL
LOD	17.8 pg/mL
Assay Range	0 – 750 ng/mL

Note: Data described were developed during assay development. Under different assay conditions, assay may perform differently than shown. For complex matrices such as serum or plasma, assay diluent optimization (for example by adding blocking agents) may improve performance of these matrices in this assay.