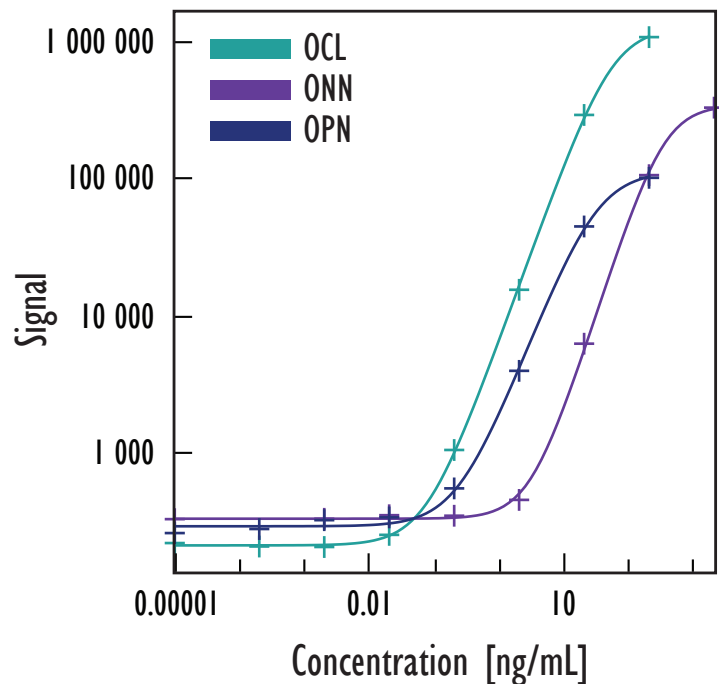


MULTI-SPOT[®] Human Bone Panel II Assay

Detection of Osteocalcin, Osteonectin, and Osteopontin in Serum and Plasma Samples



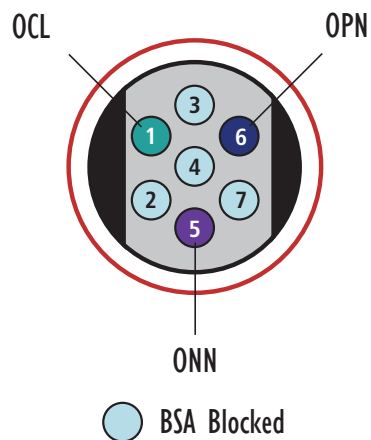
OCL		
Concentration (ng/mL)	Mean Signal	%CV
0	219	8.0
0.0002	207	15.3
0.002	205	9.0
0.02	252	8.7
0.2	1050	3.6
2	15550	6.1
20	294290	5.6
200	1089528	6.1

ONN		
Concentration (ng/mL)	Mean Signal	%CV
0	328	9.0
0.002	330	10.7
0.02	351	13.7
0.2	348	10.6
2	454	14.5
20	6276	4.0
200	106937	6.6
2000	333051	12.4

OPN		
Concentration (ng/mL)	Mean Signal	%CV
0	259	17.4
0.0002	278	23.6
0.002	322	29.6
0.02	338	6.8
0.2	550	6.3
2	3975	5.8
20	45121	10.6
200	102211	7.0

	OCL	ONN	OPN
LLOD (ng/mL)	0.023	2.6	0.050

LLOD (Lower Limit of Detection) is defined as 2.5X StdDev above the background



Kit Size	Catalog Number
1 plate	K15147C-1
5 plates	K15147C-2
20 plates	K15147C-3
20 plates (Base)	K15147A-3

MULTI-SPOT[®] Human Bone Panel II Assay

Endogenous Analyte Levels in Samples

- 4-5 normal human donors; matched sera and plasmas
- Detected level was above LLOQ for all analytes in all samples

		OCL (ng/mL)	ONN (ng/mL)	OPN (ng/mL)
Serum	Mean	5	43	7
	Median	5	43	5
	Range	2 - 10	14 - 69	2 - 14
EDTA Plasma	Mean	7	487	12
	Median	7	593	6
	Range	3 - 10	103 - 686	3 - 28
Heparin Plasma	Mean	7	265	8
	Median	6	237	7
	Range	4 - 11	119 - 560	4 - 15

Dilution Linearity

- Measured endogenous analyte levels in samples diluted 20-fold and then as shown
- $\% \text{ recovery} = \frac{\text{measured value} * \text{dilution factor} * 100}{\text{predicted value}}$
- Values presented are averages across 2-3 individual samples

	Dilution Factor	OCL	ONN	OPN
Serum	3/4	91%	91%	87%
	1/2	87%	82%	83%
	1/4	87%	78%	67%
EDTA Plasma	3/4	91%	89%	89%
	1/2	87%	86%	88%
	1/4	92%	79%	88%
Heparin Plasma	3/4	90%	92%	90%
	1/2	82%	82%	84%
	1/4	86%	74%	77%

Values presented are averages across 2-3 individual samples

Spike Recovery

- Measured analyte spiked into human samples & diluted subsequently

$$\% \text{ recovery} = \frac{\text{measured value} * 100}{\text{expected value (average from 5-6 samples each)}}$$

	Spike Level (ng/mL)	Serum	EDTA Plasma	Heparin Plasma
OCL	100	105%	109%	109%
ONN	1,000	113%	112%	114%
OPN	100	93%	90%	98%