

MCP-1

Units:	pg/mL	pg/mL	pg/mL	pg/mL
Assay Name	RnD Systems MCP-1 ELISA	Millipore Magnetic Adipokine Panel 2	Millipore Magnetic Cytokine Panel	Millipore Magnetic Metabolic Hormone Panel
Catalog Number	DCP00	HADK2MAG-61K	HCYTOMAG-60K	HMHMAG-34K
Other Analytes On Multiplex	N/A	IL-6, Insulin, Leptin, TNF-a, HGF, IL-8, NGF, IL-1b	EGF, FGF-2, Eotaxin, TGF-a, G-CSF, Flt-3L, GM-CSF, Fractalkine, IFNa2, IFNy, GRO, IL-10, MCP-3, IL-12p40, MDC, IL-12p70, PDGF-AA, IL-13, PDGF-BB, IL-15, sCD40L, IL-17, IL1Ra, sIL-2Ra, IL-1a, IL-9, IL-1b, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IP-10, MCP-1, MIP-1a, MIP-1b, RANTES, TNF-a, TNF-b, VEGF	Amylin (active), Amylin (total), C-Peptide, Ghrelin, GIP, Glucagon, IL-6, Insulin, Leptin, MCP-1, PP, PYY, TNF-a
Volume Required Per Replicate	250uL	25uL	25uL	25uL
Typical Dilution	1:2	None	None	None
Manufacturer Defined Minimum Detectible Concentration	3.40 pg/mL	1.20 pg/mL	1.90 pg/ml	6.00 pg/mL
UVM Observed Minimum Detectible Concentration	56.16 pg/mL	1.20 pg/mL	1.90 pg/mL	6.00 pg/mL
UVM Run Date	6/9/2015	4/16/2013	7/31/2015	10/9/2015
SCS081611: 1	157.23	156.58	420.56	122.54
SCS081611: 2	108.49	69.23	211.23	54.08
SCS081611: 3	194.07	115.19	243.92	83.87
SCS081611: 4	122.51	91.28	240.96	68.94
SCS081611: 5	153.47	115.10	313.04	92.34
SCS081611: 6	193.12	107.60	278.79	67.27
SCS081611: 7	183.65	138.70	395.93	120.57
SCS081611: 8	187.43	124.09	323.21	99.30
SCS081611: 9	225.46	173.54	375.94	120.50
SCS081611: 10	156.29	93.68	282.14	88.30
SCS081611: 11	171.37	87.57	287.43	64.95
SCS081611:12	181.76	131.52	342.17	106.22
SCS081611: 13	140.32	95.50	252.45	73.65
SCS081611: 14	357.37	221.23	554.70	185.73
SCS081611: 15	118.77	52.63	194.25	33.04
SCS081611: 16	199.76	109.19	279.00	94.85
SCS081611: 17	107.56	87.96	256.30	75.06
SCS081611: 18	152.53	52.13	188.76	53.72
SCS081611: 19	207.36	143.89	352.22	118.25
SCS081611: 20	161.94	104.17	240.50	73.50
Average	174.02	113.54	301.68	89.83

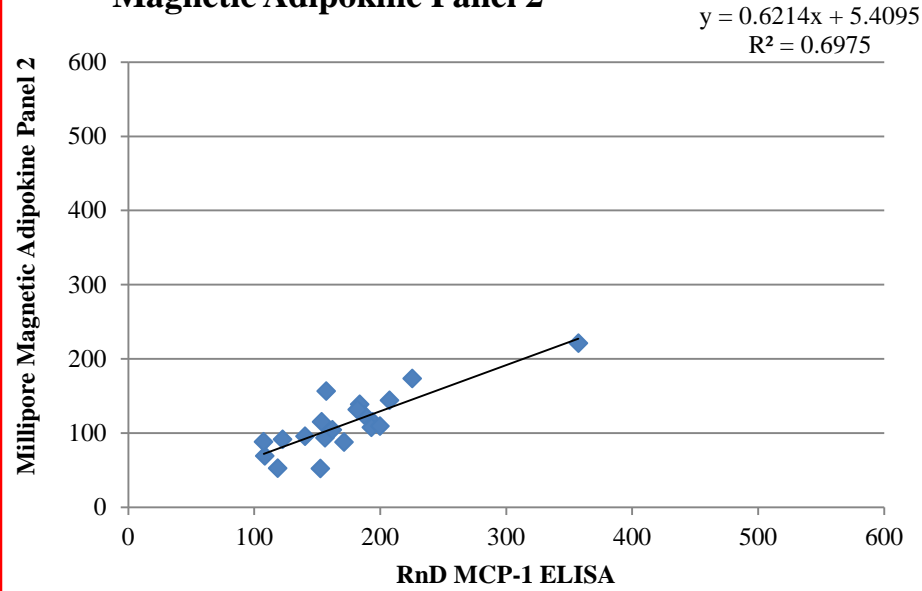
Notes:

Serum and EDTA are NOT sourced from the same pools. Each set is from unique pools/participants. Sample type correlations may differ due to a number of factors including; measured range of set, sample type variability, reagent lot variability, specimen condition, pre-analytical variation et.

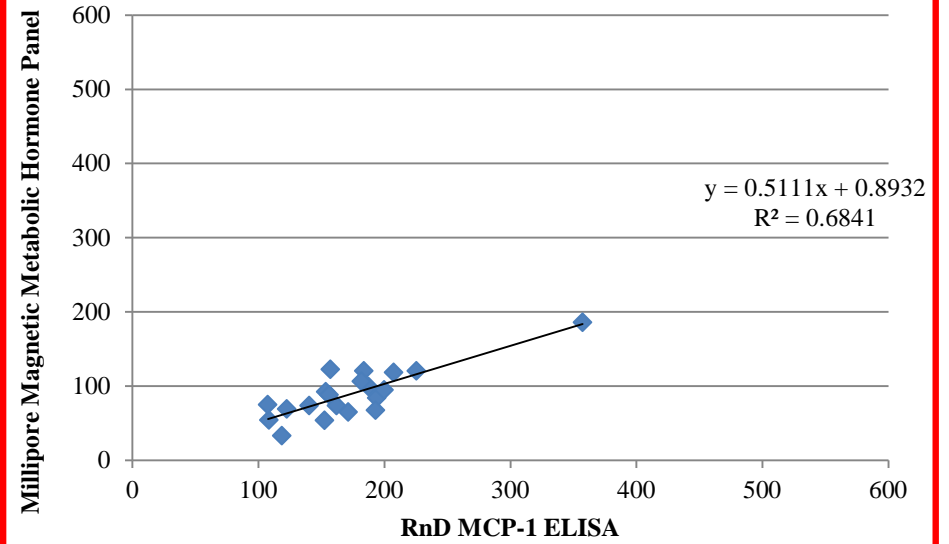
UVM Protocol for RnD ELISA is 10% extrapolation below lowest standard point.

SCS = Serum Control Set

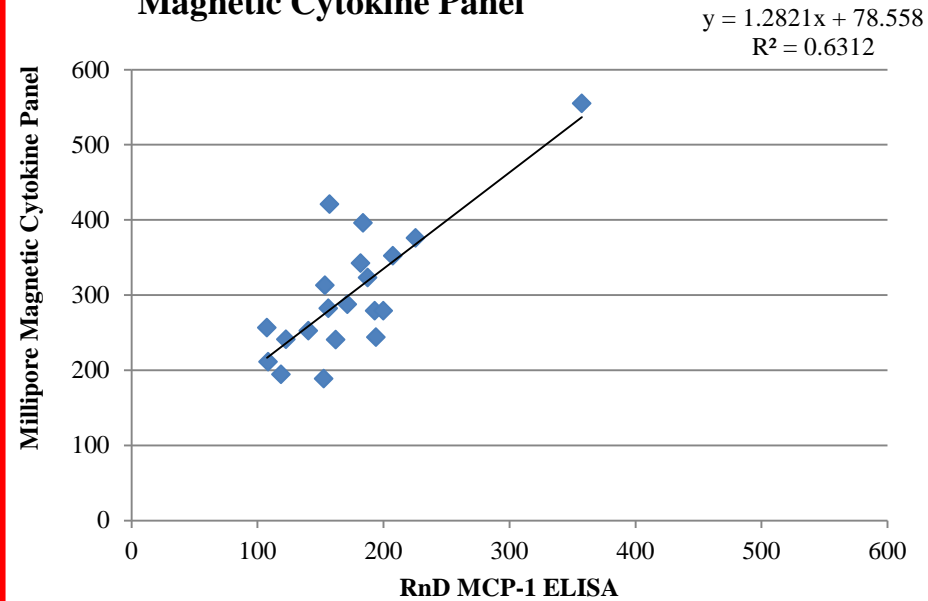
Serum MCP-1: RnD ELISA vs. Millipore Magnetic Adipokine Panel 2



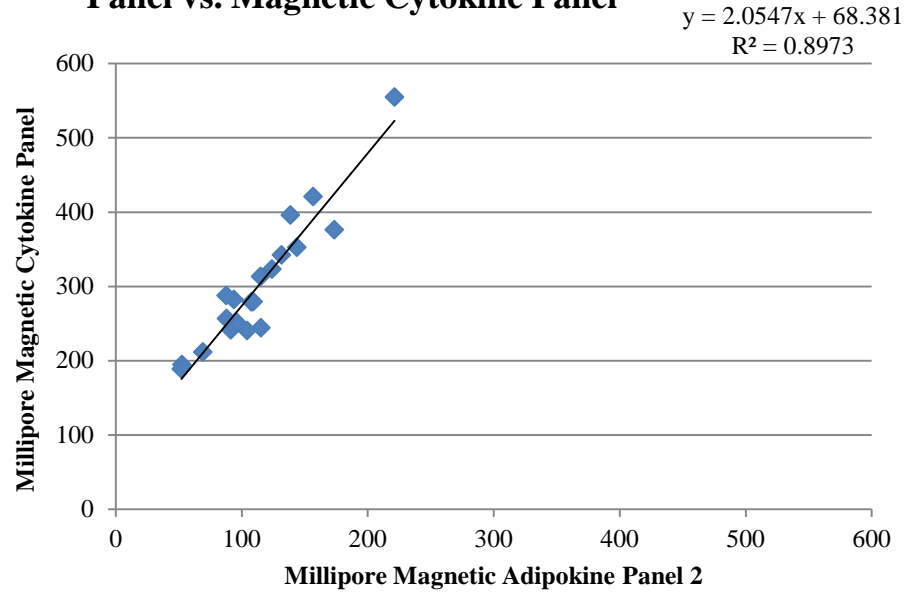
Serum MCP-1: RnD ELISA vs. Millipore Magnetic Metabolic Hormone Panel



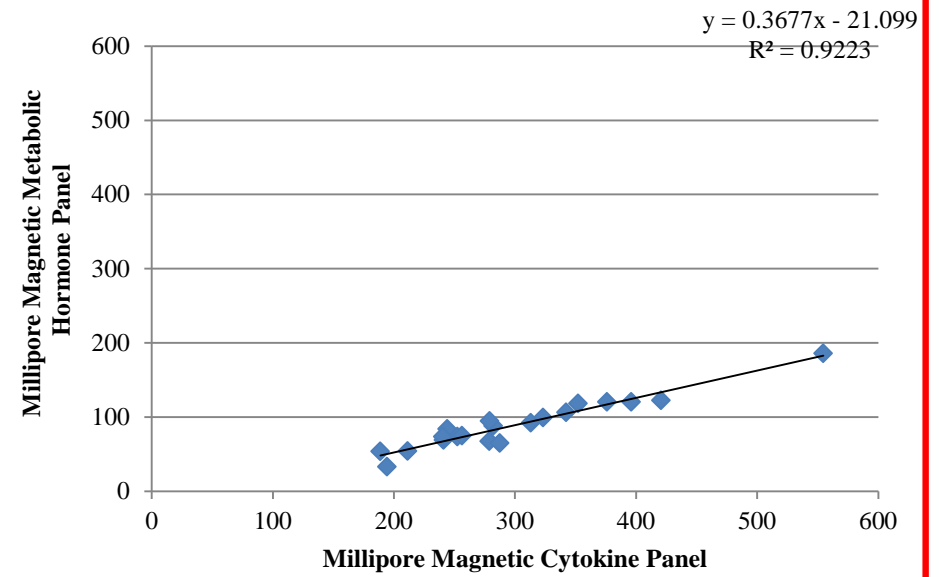
Serum MCP-1: RnD ELISA vs. Millipore Magnetic Cytokine Panel



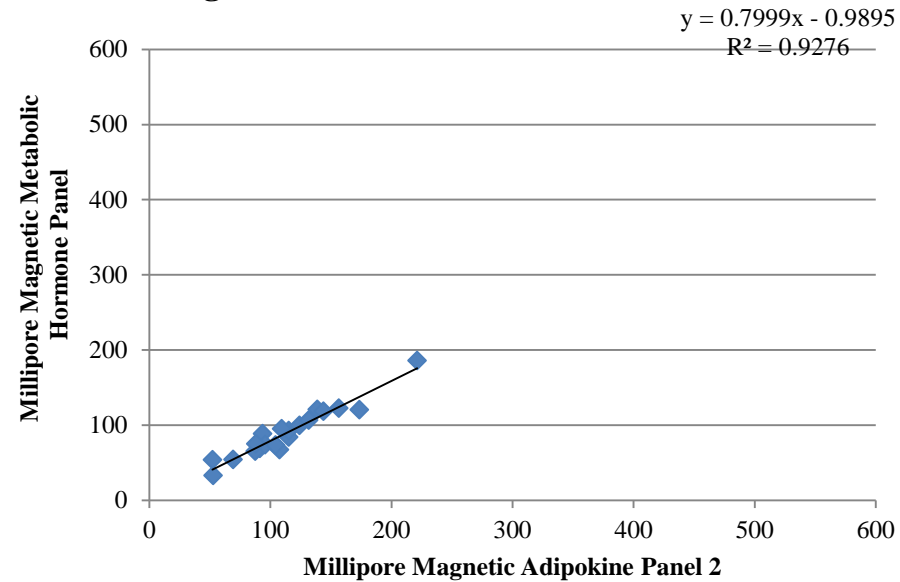
Serum MCP-1: Millipore Magnetic Adipokine Panel vs. Magnetic Cytokine Panel



Serum MCP-1: Millipore Magnetic Cytokine Panel vs. Magnetic Metabolic Hormone Panel



Serum MCP-1: Millipore Magnetic Adipokine Panel vs. Magnetic Metabolic Hormone Panel

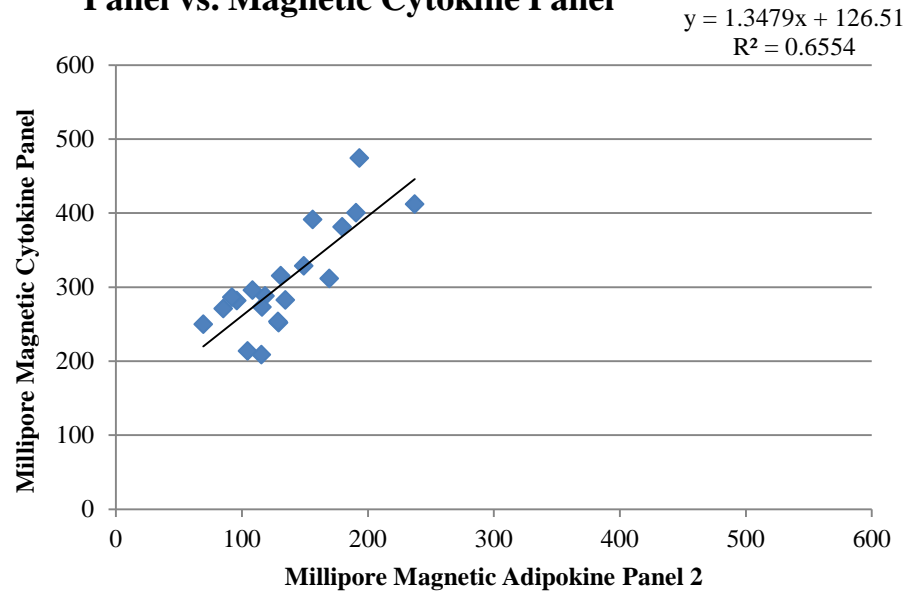


MCP-1

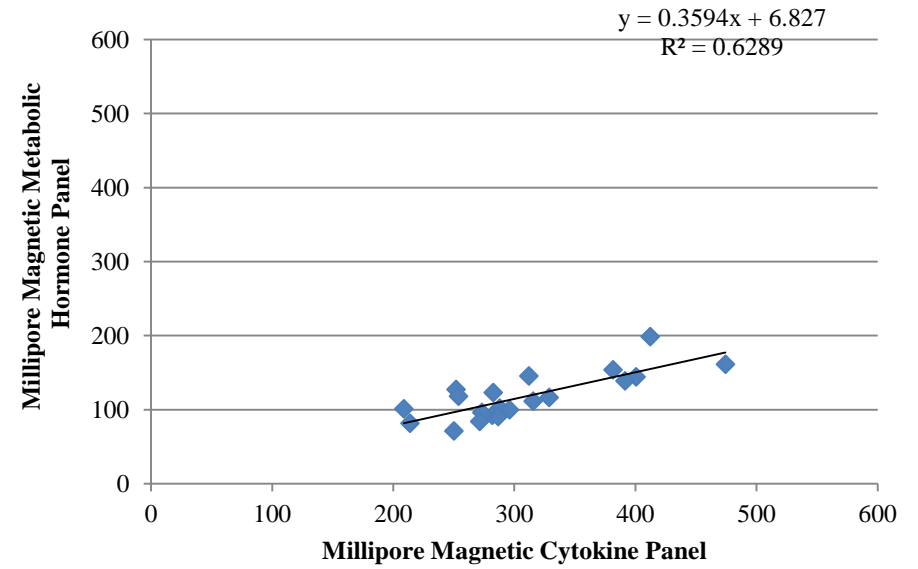
Units:	pg/mL	pg/mL	pg/mL	pg/mL
Assay Name	RnD Systems MCP-1 ELISA	Millipore Magnetic Adipokine Panel 2	Millipore Magnetic Cytokine Panel	Millipore Magnetic Metabolic Hormone Panel
Catalog Number	DCP00	HADK2MAG-61K	HCYTOMAG-60K	HMHMAG-34K
Other Analytes On Multiplex	N/A	IL-6, Insulin, Leptin, TNF-a, HGF, IL-8, NGF, IL-1b	EGF, FGF-2, Eotaxin, TGF-a, G-CSF, Flt-3L, GM-CSF, Fractalkine, IFNa2, IFNy, GRO, IL-10, MCP-3, IL-12p40, MDC, IL-12p70, PDGF-AA, IL-13, PDGF-BB, IL-15, sCD40L, IL-17, IL1Ra, sIL-2Ra, IL-1a, IL-9, IL-1b, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IP-10, MCP-1, MIP-1a, MIP-1b, RANTES, TNF-a, TNF-b, VEGF	Amylin (active), Amylin (total), C-Peptide, Ghrelin, GIP, Glucagon, IL-6, Insulin, Leptin, MCP-1, PP, PYY, TNF-a
Volume Required Per Replicate	250uL	25uL	25uL	25uL
Typical Dilution	1:2	None	None	None
Manufacturer Defined Minimum Detectible Concentration	3.40 pg/mL	1.20 pg/mL	1.90 pg/ml	6.00 pg/mL
UVM Observed Minimum Detectible Concentration	56.16 pg/mL	1.20 pg/mL	1.90 pg/mL	6.00 pg/mL
UVM Run Date	No Data	4/16/2013	7/31/2015	10/9/2015
ECS052510: 1		130.92	315.46	111.20
ECS052510: 2		118.34	287.99	101.73
ECS052510: 3		115.51	208.69	100.99
ECS052510: 4		149.20	328.74	116.39
ECS052510: 5		134.62	282.65	122.91
ECS052510: 6		95.87	281.74	92.28
ECS052510: 7		129.17	251.94	126.96
ECS052510: 8		115.93	273.09	96.12
ECS052510: 9		85.15	271.33	84.10
ECS052510: 10		92.16	286.57	90.47
ECS052510: 11		190.49	400.67	144.34
ECS052510:12		169.29	311.92	145.20
ECS052510: 13		128.77	253.86	117.99
ECS052510: 14		156.17	391.47	138.75
ECS052510: 15		193.15	474.43	161.25
ECS052510: 16		108.44	296.04	99.81
ECS052510: 17		69.30	250.10	70.98
ECS052510: 18		237.07	412.32	198.54
ECS052510: 19		179.50	381.62	153.78
ECS052510: 20		104.57	213.71	81.60
Average	#DIV/0!	135.18	308.72	117.77

ECS = EDTA Control Set

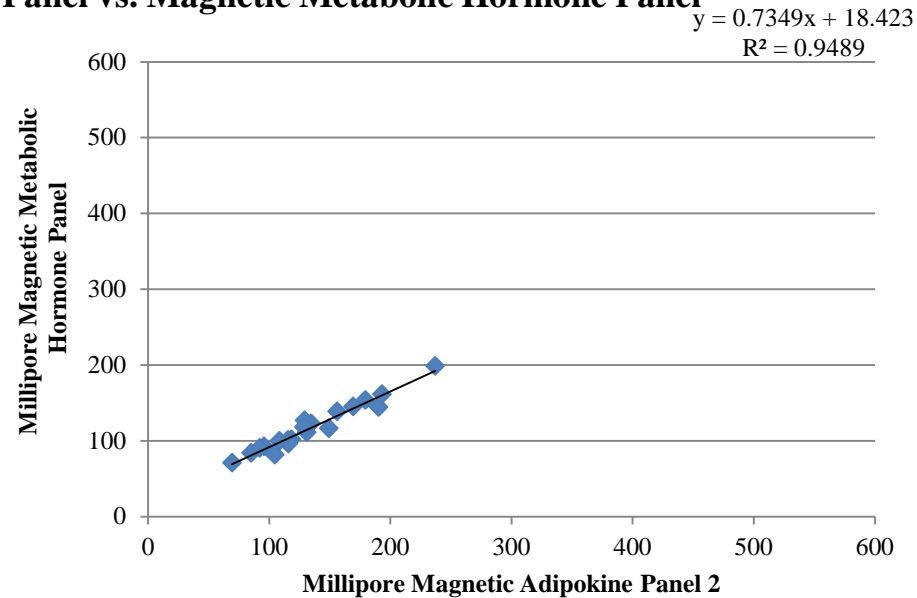
EDTA MCP-1: Millipore Magnetic Adipokine Panel vs. Magnetic Cytokine Panel



EDTA MCP-1: Millipore Magnetic Cytokine Panel vs. Magnetic Metabolic Hormone Panel



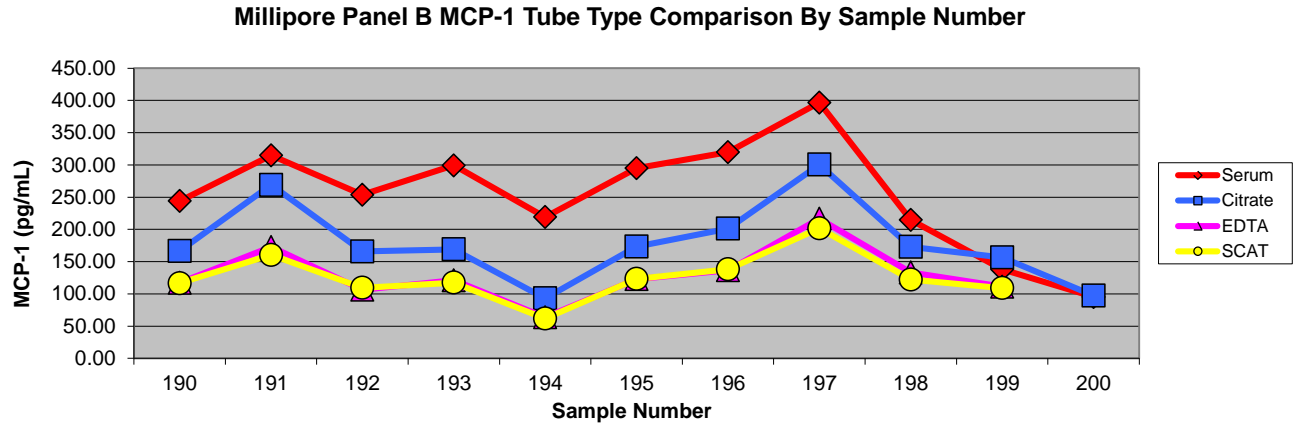
EDTA MCP-1: Millipore Magnetic Adipokine Panel vs. Magnetic Metabolic Hormone Panel



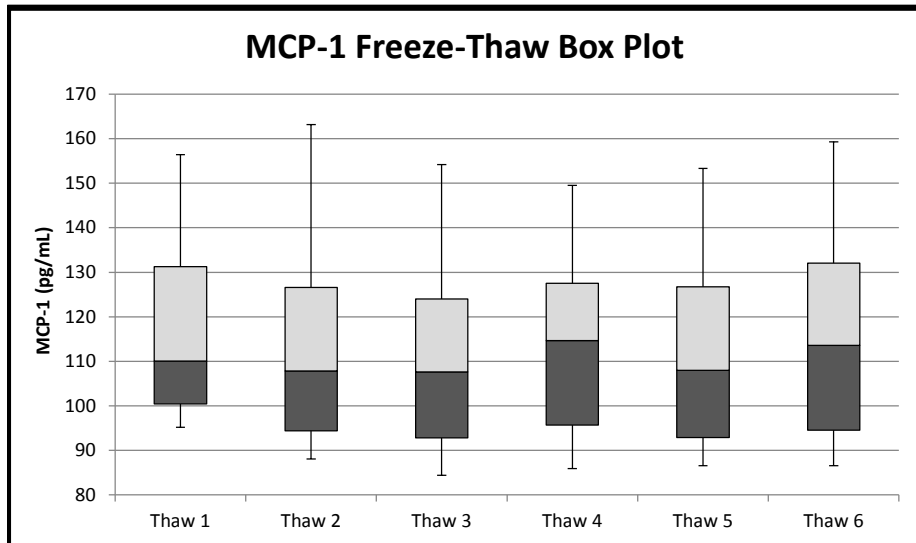
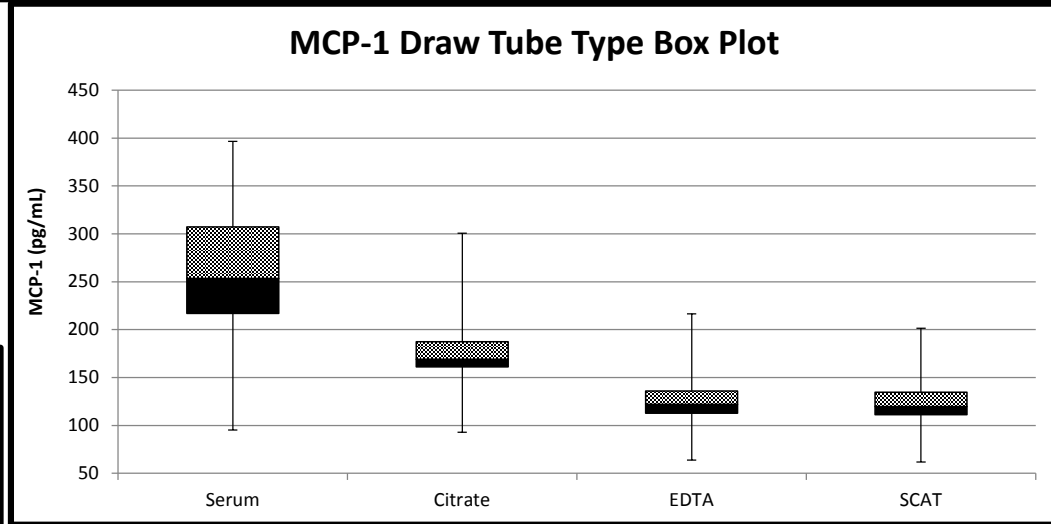
**Millipore Magnetic Adipokine Panel 2
MCP-1**

Tube Type and Freeze Thaw Comparison

Sample Number	Serum	Citrate	EDTA	SCAT
190	243.94	166.46	117.26	116.54
191	314.90	268.90	172.67	160.57
192	253.52	165.71	106.50	109.42
193	299.31	169.01	121.04	117.50
194	219.15	93.01	63.76	61.92
195	294.88	173.24	122.80	123.44
196	319.66	201.39	136.83	138.16
197	396.52	300.56	216.55	201.59
198	214.69	172.84	133.07	122.00
199	138.00	156.42	111.07	109.08
200	95.19	97.51		
Average	253.61	178.64	130.16	126.02
Sample Type Average	172.11			
Sample Type Stdev	59.36			
Sample Type CV%	34.49			



Sample Number	Thaw 1	Thaw 2	Thaw 3	Thaw 4	Thaw 5	Thaw 6
199 Serum	138.00	131.97	129.32	131.34	132.82	136.76
199 Citrate	156.42	163.20	154.19	149.50	153.35	159.29
199 EDTA	111.07	110.51	107.99	116.03	107.35	118.00
199 SCAT	109.08	105.14	107.27	113.33	108.60	109.23
200 Serum	95.19	88.06	87.96	89.86	86.58	89.69
200 Citrate	97.51	90.82	84.39	85.92	88.11	86.57
Average	117.88	114.95	111.85	114.33	112.80	116.59
Freeze/Thaw Average	114.73					
Freeze/Thaw Stdev	2.26					
Freeze/Thaw CV%	1.97					



Range of Standard Curve: 0.13 - 10,000 pg/mL
Manufacturer Defined Minimum Detectable Concentration: 0.14 pg/mL
Manufacturer Defined Intra-Assay CV% = 1.4 - 7.9 %
Manufacturer Defined Inter-Assay CV% <21%
Manufacturer Recommended Sample Type: Serum or Plasma
Data indicates a significant difference amongst sample types. Serum Reads the highest, at about 45% higher than the other sample types. EDTA and SCAT appear to read nearly identical, whereas Citrate reads between EDTA/SCAT and Serum. There appears to be no effect from freeze thaw. The CV% (1.97%) of the average of all the thaws is well below the expected Intra-Assay CV range.