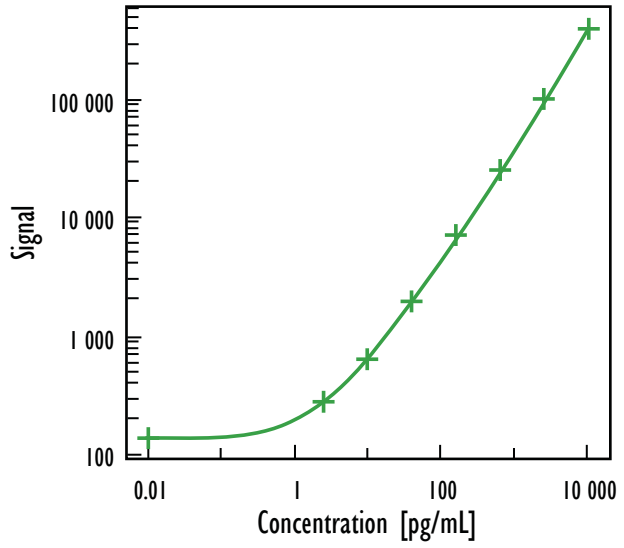


MULTI-ARRAY[®] Human Granulocyte-Macrophage Colony-Stimulating Factor Serum/Plasma Assay

Detection of Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF) in Serum and Plasma

Tissue Culture Kit



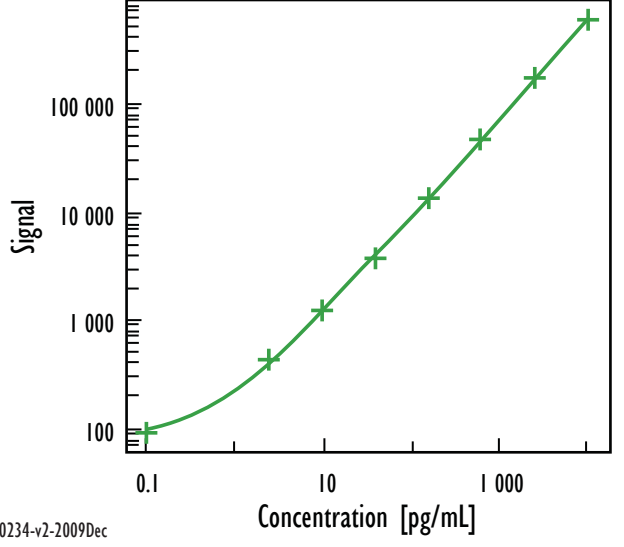
Human GM-CSF		
Concentration (pg/mL)	Signal	
	Mean	%CV
0	137	2.1
2.4	285	1.9
9.8	646	2.8
39	1968	2.8
156	7145	3.4
625	26472	1.4
2500	102130	2.5
10000	399657	4.2

Protocol	Detection Limit (pg/mL)
Tissue Culture	1.2

Endogenous Levels

Pooled normal human serum, EDTA plasma and heparin plasma samples were measured. The endogenous levels were found to be below LLOD in all samples.

Ultra-Sensitive Kit



Human GM-CSF		
Concentration (pg/mL)	Signal	
	Mean	%CV
0	96	10.1
2.4	443	3.4
9.8	1251	5.8
39	3797	6.3
156	13654	6.3
625	48160	2.0
2500	171784	5.8
10000	603237	6.1

Protocol	Detection Limit (pg/mL)
Serum/Plasma	0.14

Detection Limits were determined using 2.5 standard deviations above the background.

Kit Model	Kit Size	Catalog Number
Tissue Culture	1 plate	K151AXB-1
Tissue Culture	5 plates	K151AXB-2
Tissue Culture	25 plates	K151AXB-4
Ultra-Sensitive	1 plate	K151AXC-1
Ultra-Sensitive	5 plates	K151AXC-2
Ultra-Sensitive	25 plates	K151AXC-4
Base	25 plates	K151AXA-4
Base	250 plates	K151AXA-5

MULTI-ARRAY[®] Human Granulocyte-Macrophage Colony-Stimulating Factor Serum/Plasma Assay

Linearity of Dilution and Spike Recovery

Dilution Linearity

- Human serum, heparin plasma, and EDTA plasma pooled samples were evaluated for linear dilution. Pooled samples were spiked at mid level with calibrator and then diluted with Diluent 2. Recovery is calculated from the measured concentration of the previous dilution.

$$\% \text{ Recovery} = (\text{measured} \times \text{dilution factor}) / \text{expected} \times 100$$

	Fold Dilution	GM-CSF		
		Conc. (pg/mL)	% CV	% Recovery
Serum	1	1288	5.1	
	2	1277	5.2	99
	4	1329	3.4	103
	8	1310	3.8	102
	EDTA Plasma	1	1301	3.6
EDTA Plasma	2	1546	0.5	119
	4	1674	2.1	129
	8	1611	1.2	124
	Heparin Plasma	1	1208	5.4
Heparin Plasma	2	1252	2.0	104
	4	1307	4.5	108
	8	1348	7.1	112

Spike Recovery

- Human serum, heparin plasma, and EDTA plasma pooled samples were spiked with calibrators at multiple levels throughout the range of the assay. Each spike was tested in ≥ 3 replicates.

$$\% \text{ Recovery} = \text{measured} / \text{expected} \times 100$$

GM-CSF	Spike Level (pg/mL)	Measured Conc. (pg/mL)	% CV	% Recovery
Serum	0	0	12.1	
	49	42	4.8	85
	593	470	6.4	79
	2449	2071	1.4	85
EDTA Plasma	0	0	13.4	
	49	44	3.1	89
	593	483	6.2	81
	2449	2157	3.8	88
Heparin Plasma	0	0	15.9	
	49	41	9.0	83
	593	503	2.6	85
	2449	1994	2.9	81