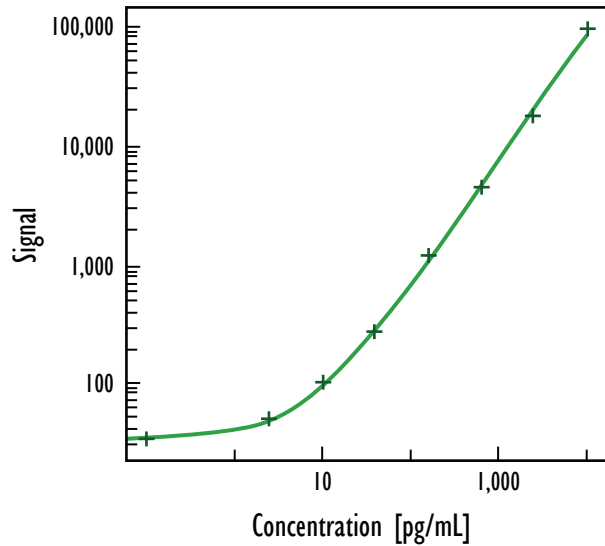


MULTI-ARRAY[®] Human Macrophage Colony Stimulating Factor Ultra-Sensitive Assay

Detection of Macrophage Colony Stimulating Factor (M-CSF) in Human Serum and Plasma Samples

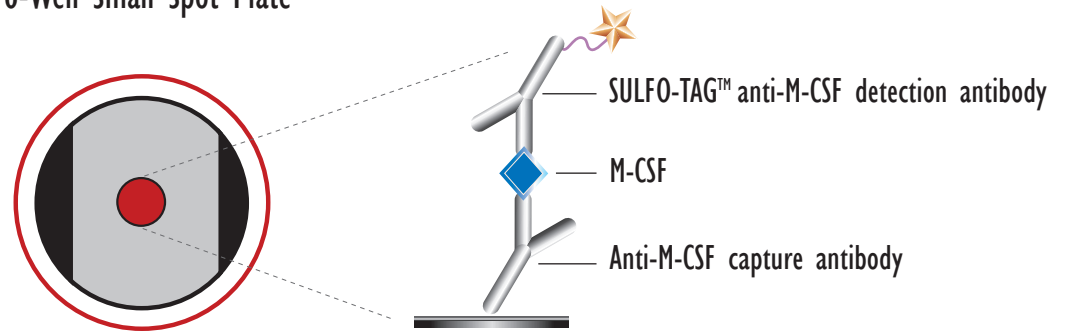
Typical Standard Curve Data



Human M-CSF	
Concentration (pg/mL)	Mean Signal
0	35
2.4	52
9.8	106
39	283
156	1,235
625	4,658
2,500	18,574
10,000	98,358

Standard curve data is from a representative experiment

MSD MULTI-ARRAY[®]
96-Well Small Spot Plate



Typical Detection Parameters

Protocol	LLOD (pg/mL)
Serum and Plasma	6.1

Definition of Detection Parameters

LLOD = Lower Limit of Detection is 2.5 stdev above the background

Kit Size	Catalog Number
1 plate	K1511QC-1
5 plates	K1511QC-2
20 plates	K1511QC-3
20 plates (Base)	K1511QC-3

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Spike Recovery

	Spike Level (pg/mL)	% Recovery of Spiked Calibrator
Serum	39	113%
	156	109%
	625	100%
EDTA Plasma	39	115%
	156	119%
	625	111%
Heparin Plasma	39	114%
	156	115%
	625	106%

- Measured analyte spiked into neat human samples
- % recovery = $\frac{\text{measured value} * 100}{\text{expected value}}$

Endogenous Levels of Human M-CSF

	pg/mL	Endogenous Analyte Levels
Serum	Mean	68
	Median	60
	Range	35 - 132
EDTA Plasma	Mean	81
	Median	52
	Range	26 - 181
Heparin Plasma	Mean	79
	Median	64
	Range	37 - 146

- 8 normal human donors; matched sera and plasmas
- Detected level was above limit of quantitation (LOQ) for all analytes in all samples
- Average % CV for measured samples was less than 7%

Dilution Linearity

	Dilution Factor	% Recovery of Dilution Linearity
Serum	1/2	121%
	1/4	102%
	1/8	102%
EDTA Plasma	1/2	104%
	1/4	112%
	1/8	117%
Heparin Plasma	1/2	97%
	1/4	108%
	1/8	112%

- Serum and plasma samples were diluted in HSC Assay Diluent prior to assay
- % recovery = $\frac{\text{measured value} * \text{dilution factor} * 100}{\text{predicted value}}$