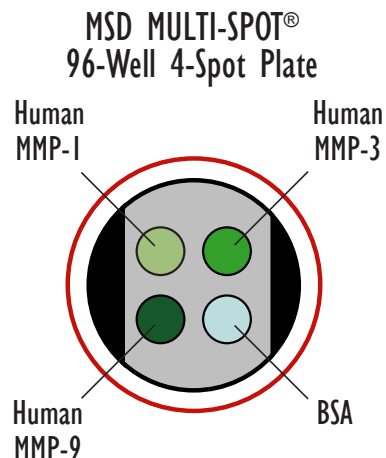
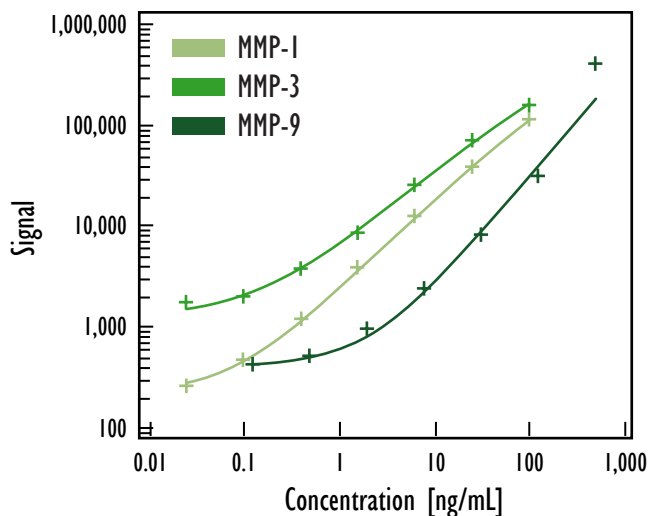


MULTI-SPOT[®] Human Matrix Metalloprotease Ultrasensitive Assay

Detection of MMP-1, MMP-3 and MMP-9 in Human Serum Samples



Endogenous Levels (ng/mL)

Matrix	MMP-1	MMP-3	MMP-9
Serum	1.8	32.6	281
Heparin Plasma	3.4	21.1	249

Endogenous levels are based on measurements of pooled Human Serum and Heparin Plasma samples.

Dilutional Linearity

Dilutional Linearity	Dilution Factor	% Recovery MMP-1	% Recovery MMP-3	% Recovery MMP-9
Serum	1/20	105	95	104
	1/40	130	93	113
Heparin Plasma	1/20	82	81	99
	1/40	96	79	101

Detection Limits

Detection Limit (ng/mL)	MMP-1	MMP-3	MMP-9
LLOD	0.008	0.04	0.24

Signal (Serum Protocol)			Signal (Serum Protocol)	
Concentration (ng/mL)	MMP-1	MMP-3	Concentration (ng/mL)	MMP-9
100	122,200	154,444	500	389,431
25	39,444	72,222	125	32,271
6.25	12,811	25,751	31.25	8,624
1.6	3,804	8,866	7.8	2,450
0.4	1,176	3,720	2.0	987
0.1	474	2,206	0.5	541
0.02	262	1,791	0.12	395
0	212	1,287	0	385

Recoveries

% Spike Recovery	MMP-1	MMP-3	MMP-9
Serum	95	88	129
Heparin Plasma	98	97	129

Pooled human serum was spiked with MMP-1 and MMP-3 at 100 ng/mL and MMP-9 at 500 ng/mL. These samples were diluted by 10 fold prior to the assay.

Kit Size	SI2400	SI6000
1 plate	K15034C-1	K11034C-1
5 plates	K15034C-2	K11034C-2
20 plates	K15034C-4	K11034C-4
20 plates (Base)	K15034A-1	K11034A-1

Multiplexing MMPs

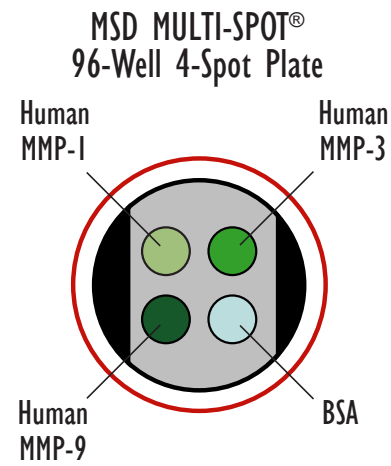
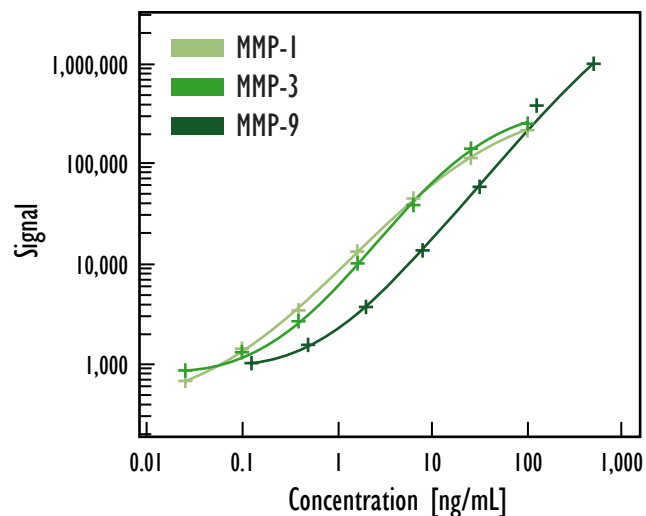
Cross-Reactivity of MSD MMP Assays Using the Serum Protocol and the Human MMP 3-plex (1,3,9) Ultrasensitive Kit

MMP calibrators were assayed individually using the Human MMP 3-plex Ultrasensitive Kit.

Calibrator	Concentration (ng/mL)	Counts on Spot			% Cross-reactivity		
		MMP-1	MMP-3	MMP-9	MMP-1	MMP-3	MMP-9
MMP-1	0	105	148	112	100.00%	0.22%	0.62%
	100	93,276	518	208			
MMP-3	0	105	148	112	0.41%	100.00%	1.48%
	100	487	168,333	343			
MMP-9	0	105	148	112	0.01%	0.03%	100.00%
	100	112	203	15,717			
MMP-2	0	105	148	112	-0.02%	-0.01%	-0.12%
	100	90	125	93			
MMP-10	0	105	148	112	0.05%	8.44%	0.05%
	100	149	14,344	120			
MMP-7	0	105	148	112	-0.02%	-0.01%	-0.12%
	100	84	131	93			

MULTI-SPOT[®] Human Matrix Metalloprotease Ultrasensitive Assay

Detection of MMP-1, MMP-3 and MMP-9 in Tissue Culture Samples



Detection Limits

Detection Limit (ng/mL)	MMP-1	MMP-3	MMP-9
LLOD	0.021	0.043	0.213

Signal (Serum Protocol)			Signal (Serum Protocol)	
Concentration (ng/mL)	MMP-1	MMP-3	Concentration (ng/mL)	MMP-9
100	222,879	247,897	500	932,816
25	115,165	140,329	125	355,849
6.25	43,443	40,847	31.25	57,351
1.6	13,611	10,101	7.8	12,357
0.4	3,551	2,689	2.0	4,142
0.1	1,168	1,536	0.5	1,426
0.02	846	733	0.12	1,003
0	387	763	0	746

Kit Size	SI2400	SI6000
1 plate	K15034C-1	K11034C-1
5 plates	K15034C-2	K11034C-2
20 plates	K15034C-4	K11034C-4
20 plates (Base)	K15034A-1	K11034A-1