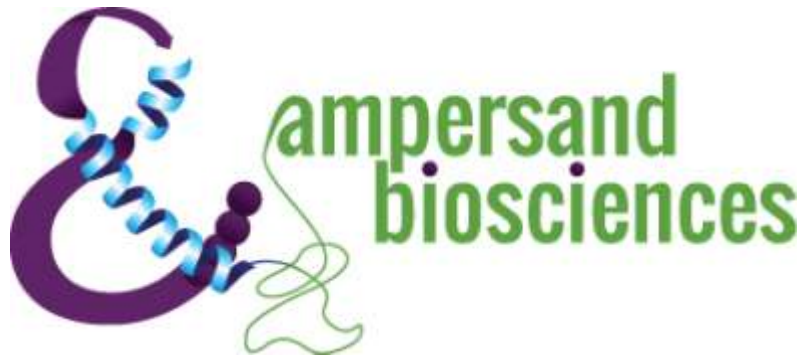


Mouse High Sensitivity Cytokine Panel 1

Kit # M102-K

Validation Report Version 1.0

May 13, 2024



### 1. Assay Description:

A multiplex assay was developed and validated for the measurement of Mouse IFN $\gamma$ , IL-1 $\alpha$ , IL-1 $\beta$ , IL-10, IL-12p40, IL-12p70, IL-13, IL-2, IL-4, IL-5, IL-6, KC/GRO and TNF $\alpha$ . The kit is microsphere-based and consist of using antigen-specific antibodies covalently coupled to magnetic Luminex beads and biotinylated detection antibodies in a capture-sandwich format. All incubations take place at room temperature in a 96-well plate. 30  $\mu$ L of standard, controls or sample are added to the appropriate wells, followed by 10  $\mu$ L of blocker and 10  $\mu$ L of multiplexed capture-antibody microspheres. The plate is incubated for 2 hours at ambient temperature on a plate shaker. After washing 3 times, 40 $\mu$ L of detection antibodies are added to each well, thoroughly mixed, and incubated 1 hour at ambient temperature on a plate shaker. The Streptavidin-Phycoerythrin conjugate (SA-PE) working solution is then added to the plate and incubated for 30 minutes. The plate is then washed 3 times and the beads are resuspended in 100  $\mu$ L of wash buffer. After shaking on a plate shaker for 5 minutes, the plate is then analyzed on the Luminex 200 Analyzer.

### 2. Control and Sample Description:

Control	Description
Control 1	Normal Mouse Serum (33%) spiked with Recombinant IL-1 $\alpha$ , IL-1 $\beta$ , IL-10, IL-12p70, IL-13, IL-2, IL-4, IL-5, and IL-6.
Control 2	Normal Mouse Serum (8.3%) spiked with Recombinant IFN $\gamma$ , IL-1 $\alpha$ , IL-1 $\beta$ , IL-10, IL-12p40, IL-12p70, IL-13, IL-2, IL-4, IL-5, IL-6, KC/GRO, and TNF $\alpha$ .

Sample	Description
Serum 1	Normal Mouse Serum spiked with Recombinant IFN $\gamma$ , IL-1 $\alpha$ , IL-1 $\beta$ , IL-10, IL-12p40, IL-12p70, IL-13, IL-2, IL-4, IL-5, IL-6, KC/GRO, and TNF $\alpha$ .
Serum 2	Normal Mouse Serum spiked with Recombinant IL-1 $\alpha$ , IL-1 $\beta$ , IL-12p70, IL-13, and IL-5.
Plasma 1	Normal Mouse Plasma spiked with Recombinant IL-1 $\beta$ , IL-12p70, and IL-5.
Plasma 2	Normal Mouse Plasma spiked with Recombinant IL-1 $\beta$ , IL-12p70, IL-13, IL-2, IL-4, and IL-5.

### 3. LLOQ, LDD and Curves:

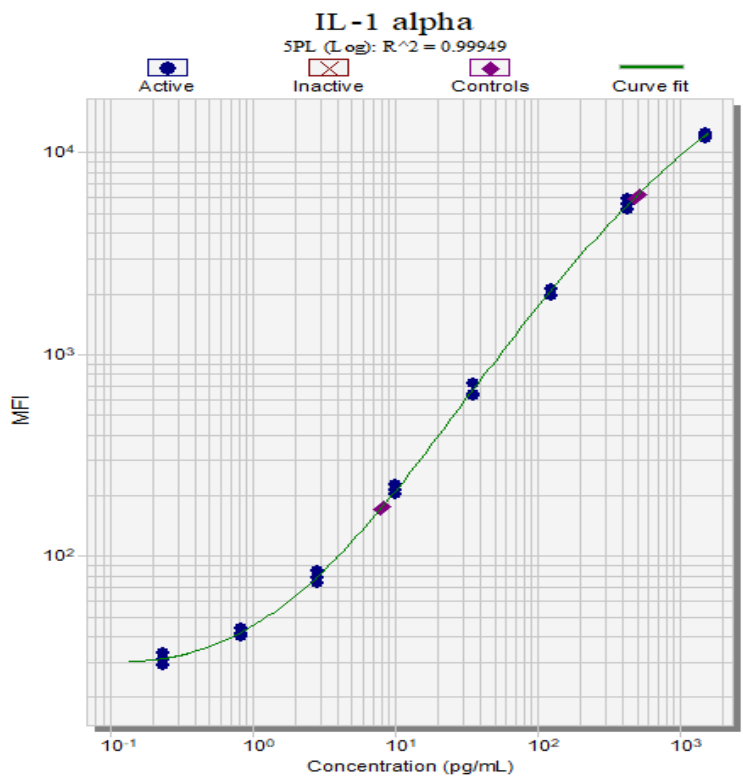
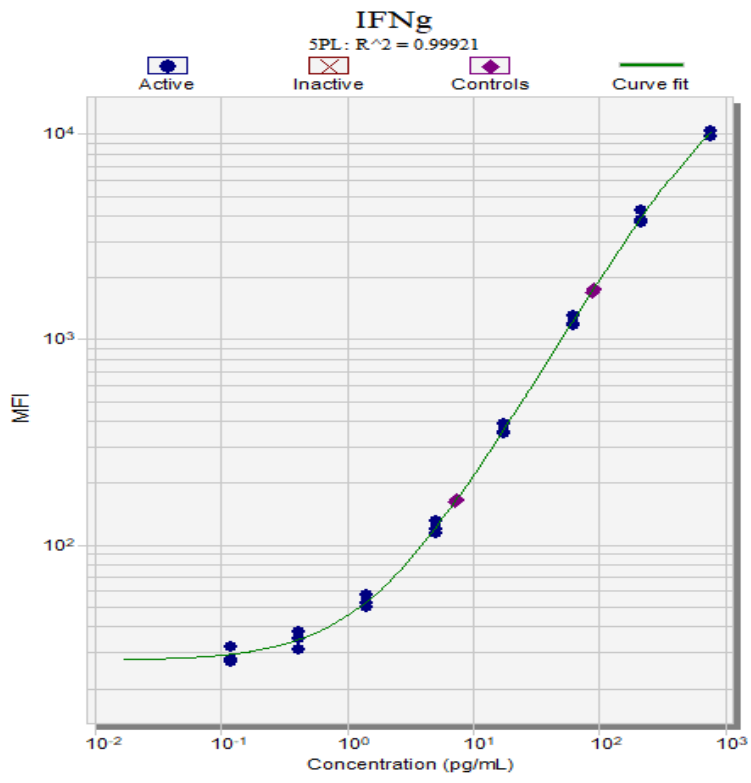
**LDD:** MFI (Median Fluorescent Intensity) for 20 replicates of the standard curve diluent was averaged and two (2) standard deviations added. This value was calculated to concentration off the standard curve.

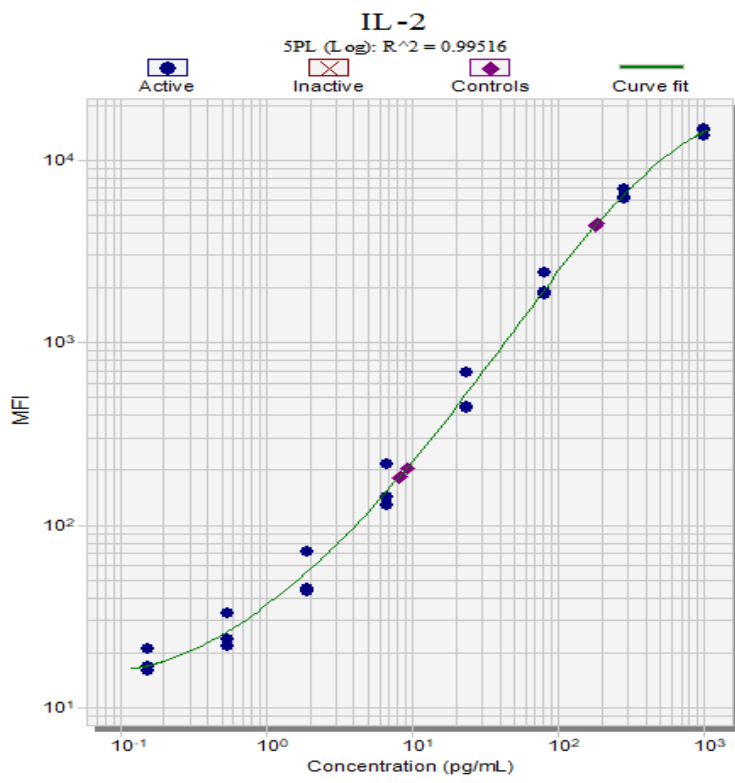
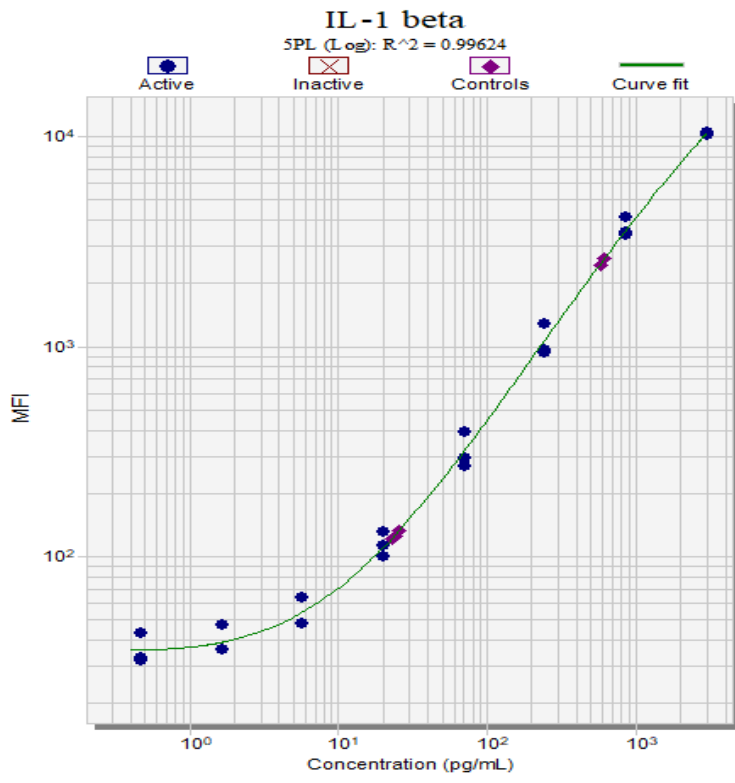
**LLOQ:** LLOQ was assessed by diluting a low serum sample for 8, 2-fold dilutions in triplicate. The LLOQ represents the value at which 30% CV was attained, with linearity with 70-130%. If that value calculates lower than the LOD, then the LLOQ value is equal to the LOD.

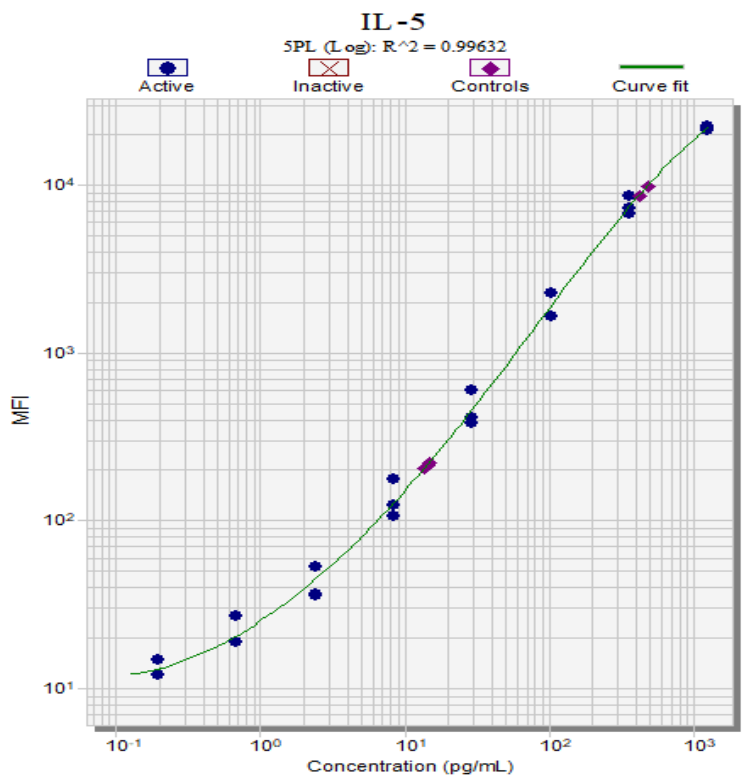
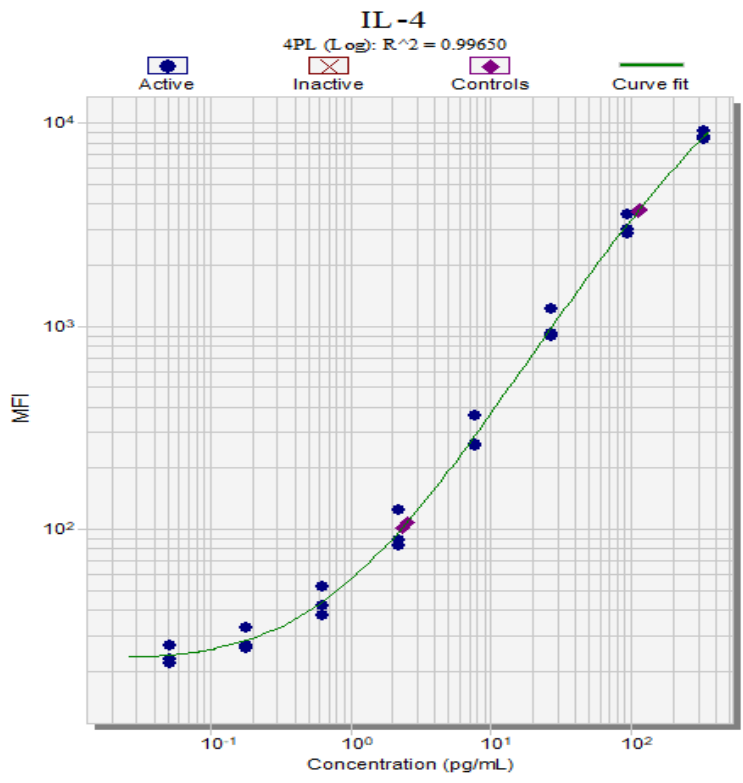
		S1	S8	LDD	LLOQ
IFN $\gamma$	pg/mL	0.12	750	0.46	0.46
IL-1 $\alpha$	pg/mL	0.23	1500	0.65	1.2
IL-1 $\beta$	pg/mL	0.47	3000	1.5	1.5
IL-10	pg/mL	0.19	1250	0.30	0.30
IL-12p40	pg/mL	0.78	5000	8.0	8.0
IL-12p70	pg/mL	2.33	15000	8.2	8.2
IL-13	pg/mL	0.16	1000	0.38	1.2
IL-2	pg/mL	0.16	1000	0.58	0.90
IL-4	pg/mL	0.051	330	0.10	0.10
IL-5	pg/mL	0.19	1250	0.20	0.20
IL-6	pg/mL	0.23	1500	0.20	0.20
KC/GRO	pg/mL	0.23	1500	1.2	1.2
TNF $\alpha$	pg/mL	0.078	500	0.10	0.10

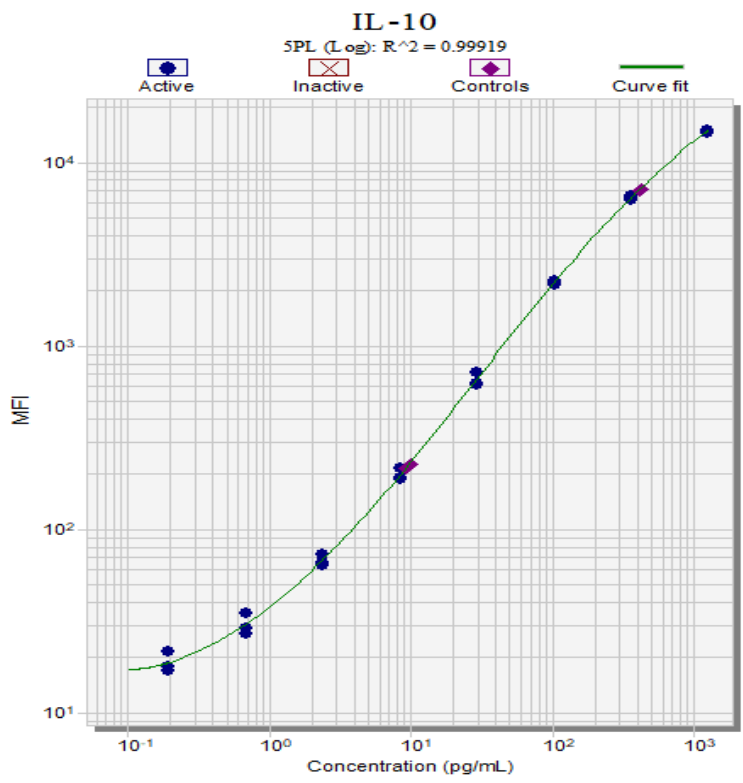
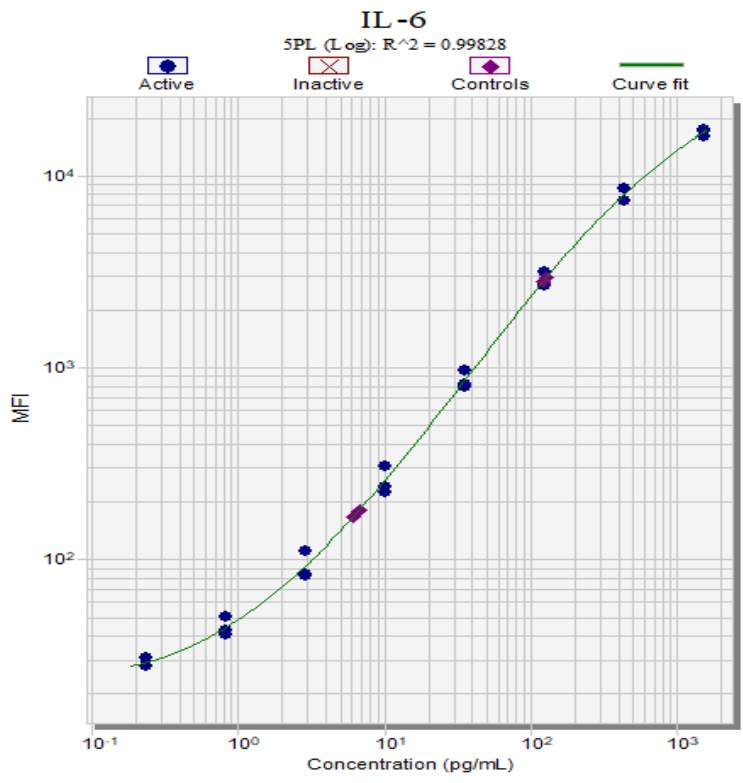
X Dilution Factor		S1	S8	LDD	LLOQ
IFN $\gamma$	pg/mL	0.59	3750	2.3	2.3
IL-1 $\alpha$	pg/mL	1.2	7500	3.3	6.0
IL-1 $\beta$	pg/mL	2.3	15000	7.5	7.5
IL-10	pg/mL	0.97	6250	1.5	1.5
IL-12p40	pg/mL	3.9	25000	40	40
IL-12p70	pg/mL	12	75000	41	41
IL-13	pg/mL	0.78	5000	1.9	6.0
IL-2	pg/mL	0.78	5000	2.9	4.5
IL-4	pg/mL	0.26	1650	0.50	0.50
IL-5	pg/mL	0.97	6250	1.0	1.0
IL-6	pg/mL	1.2	7500	1.0	1.0
KC/GRO	pg/mL	1.2	7500	6.0	6.0
TNF $\alpha$	pg/mL	0.39	2500	0.50	0.50

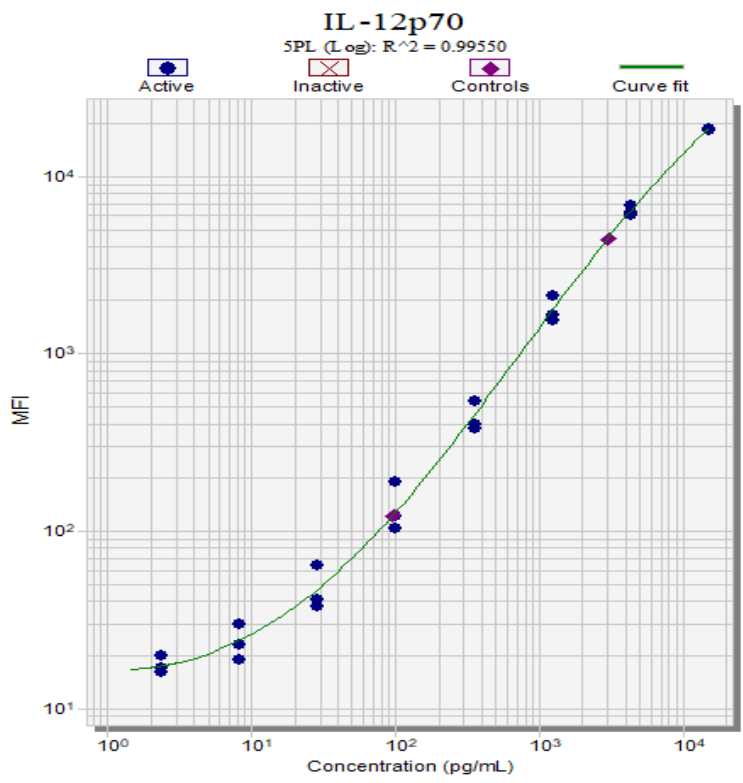
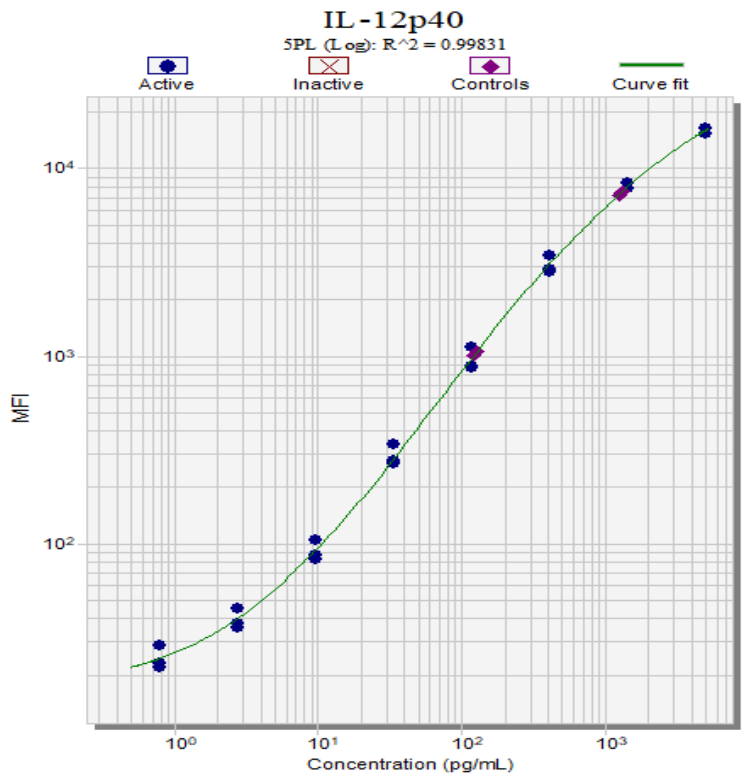
**Curves:** Curves were calculated using the best fit function in Plate Viewer Software. The S1 is the lowest level standard and the S8 is the highest.



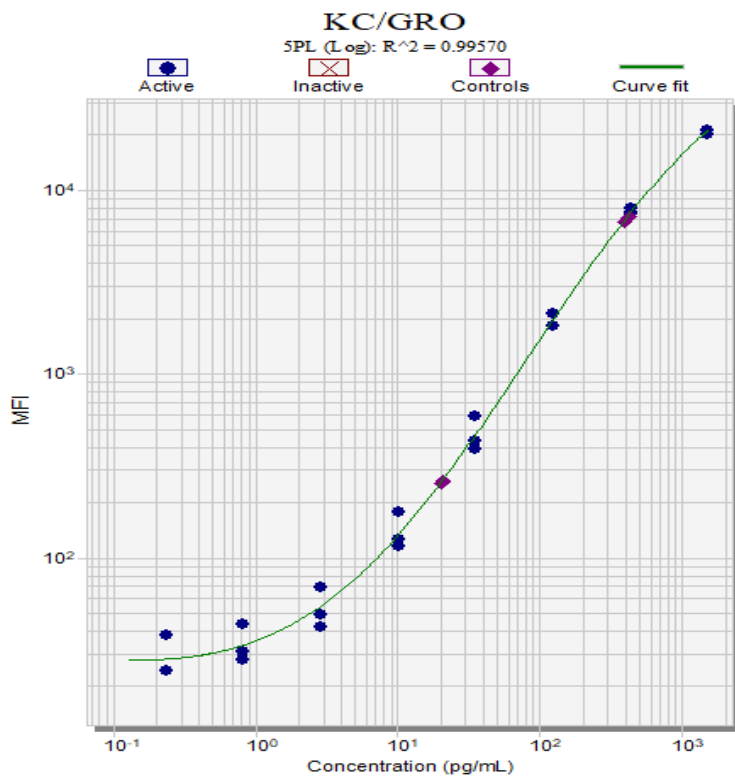
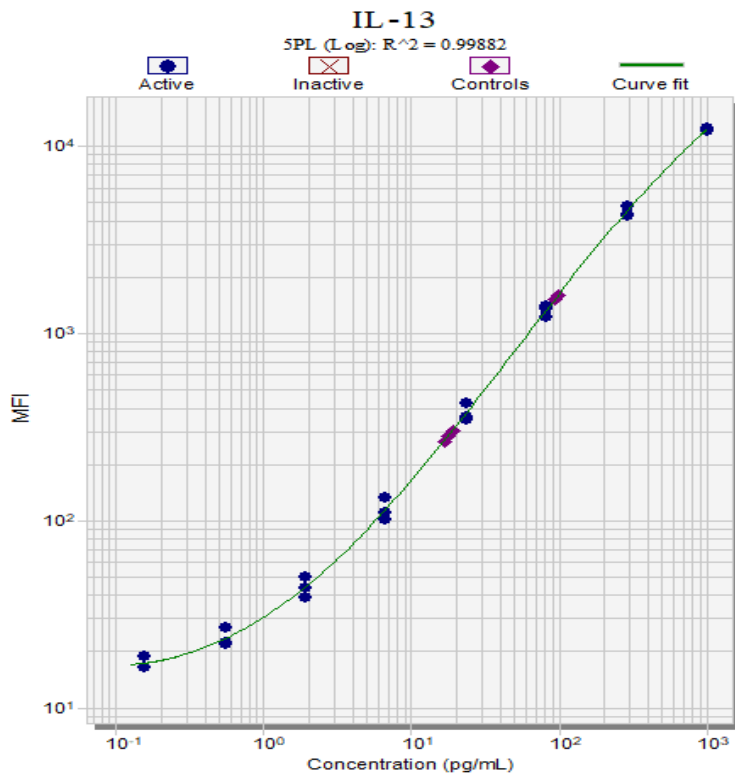


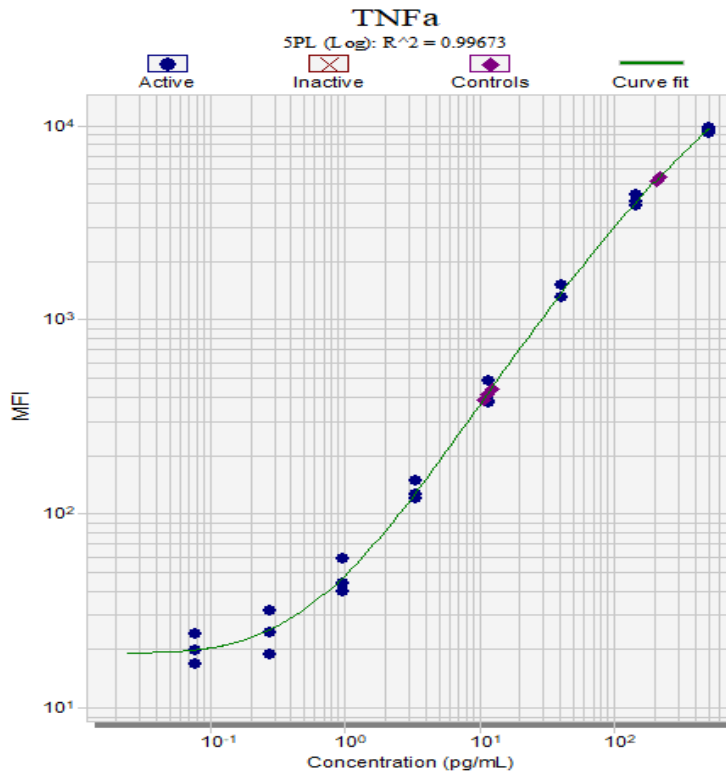












**4. Precision:**

Control samples were run in triplicate over 3 runs over 2 days with 2 analysts. Precision is the % CV of each run (intra, each run; inter, over 3 runs). Acceptance for precision is <20% CV. All assays meet acceptance for precision.

IFN $\gamma$		1	2	3	Inter
Control 1	Mean	6.8	7.1	7.2	7.0
	% CV	4%	3%	3%	4%
Control 2	Mean	84	87	82	84
	% CV	3%	3%	4%	3%

IL-1 $\alpha$		1	2	3	Inter
Control 1	Mean	7.7	7.7	8.7	8.0
	% CV	2%	6%	4%	7%
Control 2	Mean	494	484	457	478
	% CV	4%	3%	2%	4%

IL-1 $\beta$		1	2	3	Inter
Control 1	Mean	21	26	24	24
	% CV	3%	3%	1%	8%
Control 2	Mean	556	609	497	554
	% CV	4%	5%	2%	9%

IL-10		1	2	3	Inter
Control 1	Mean	10	9.4	10	10
	% CV	3%	5%	2%	5%
Control 2	Mean	391	426	343	387
	% CV	4%	2%	1%	10%

IL-12p40		1	2	3	Inter
Control 1	Mean	122	133	126	127
	% CV	6%	5%	3%	6%
Control 2	Mean	1117	1143	1187	1149
	% CV	1%	4%	3%	4%

IL-12p70		1	2	3	Inter
Control 1	Mean	85	92	94	90
	% CV	3%	3%	3%	5%
Control 2	Mean	2773	2973	2647	2798
	% CV	1%	3%	2%	5%

IL-13		1	2	3	Inter
Control 1	Mean	17	14	20	17
	% CV	3%	1%	3%	14%
Control 2	Mean	87	91	90	89
	% CV	2%	2%	2%	3%

IL-2		1	2	3	Inter
Control 1	Mean	7.0	7.1	7.6	7.2
	% CV	3%	4%	1%	4%
Control 2	Mean	168	170	175	171
	% CV	3%	3%	4%	4%

IL-4		1	2	3	Inter
Control 1	Mean	2.1	2.2	2.3	2.2
	% CV	5%	3%	6%	5%
Control 2	Mean	103	109	98	103
	% CV	1%	2%	0%	5%

IL-5		1	2	3	Inter
Control 1	Mean	12	13	13	13
	% CV	5%	2%	9%	7%
Control 2	Mean	408	458	341	402
	% CV	1%	4%	2%	13%

IL-6		1	2	3	Inter
Control 1	Mean	5.3	5.8	6.2	5.8
	% CV	3%	1%	3%	7%
Control 2	Mean	114	132	119	122
	% CV	2%	2%	6%	7%

KC/GRO		1	2	3	Inter
Control 1	Mean	19	21	21	20
	% CV	1%	1%	2%	6%
Control 2	Mean	344	396	363	368
	% CV	2%	1%	2%	6%

TNF $\alpha$		1	2	3	Inter
Control 1	Mean	10	11	11	11
	% CV	2%	3%	4%	6%
Control 2	Mean	195	197	175	189
	% CV	3%	1%	1%	6%

#### 5. Linearity:

Linearity was assessed using 2 serum and 2 plasma samples spiked with the standard and diluted 1:2 for 8 dilutions. Percent Recovery was calculated using the calculated value (with kit dilution) as expected (observed x dilution / expected concentration X 100). The acceptance range for linearity is 70-130% recovery for all values above the LLOQ. All assays meet acceptance criteria.

IFN $\gamma$	Serum 1	Serum 2	Plasma 1	Plasma 2
pg/ml				
1:5	2375	2600	3330	2315
1:10	1130	1270	1270	1315
1:20	557	705	607	849
1:40	270	346	272	329
2	95%	98%	76%	114%
4	99%	111%	96%	129%
8	97%	98%	90%	78%

IL-1 $\alpha$	Serum 1	Serum 2	Plasma 1	Plasma 2
pg/ml				
1:5	511	458	545	538
1:10	258	257	271	305
1:20	131	140	138	171
1:40	67	77	70	75
2	101%	112%	99%	113%
4	102%	109%	102%	112%
8	103%	110%	101%	88%

<b>IL-1<math>\beta</math></b>				
<b>pg/ml</b>	<b>Serum 1</b>	<b>Serum 2</b>	<b>Plasma 1</b>	<b>Plasma 2</b>
<b>1:5</b>	4520	4115	3835	4000
<b>1:10</b>	2075	1940	1725	2170
<b>1:20</b>	965	1088	847	1325
<b>1:40</b>	425	501	393	494
<b>2</b>	92%	94%	90%	109%
<b>4</b>	93%	112%	98%	122%
<b>8</b>	88%	92%	93%	75%

<b>IL-10</b>				
<b>pg/ml</b>	<b>Serum 1</b>	<b>Serum 2</b>	<b>Plasma 1</b>	<b>Plasma 2</b>
<b>1:5</b>	37	35	41	34
<b>1:10</b>	20	17	18	20
<b>1:20</b>	10	10	10	12
<b>1:40</b>	5.5	5.3	5.0	5.4
<b>2</b>	106%	100%	89%	116%
<b>4</b>	104%	120%	106%	118%
<b>8</b>	108%	102%	104%	94%

<b>IL-12p40</b>				
<b>pg/ml</b>	<b>Serum 1</b>	<b>Serum 2</b>	<b>Plasma 1</b>	<b>Plasma 2</b>
<b>1:5</b>	332	272	443	322
<b>1:10</b>	188	149	204	179
<b>1:20</b>	106	87	105	98
<b>1:40</b>	54	45	53	42
<b>2</b>	113%	109%	92%	111%
<b>4</b>	112%	117%	103%	110%
<b>8</b>	103%	102%	101%	86%

<b>IL-12p70</b>				
<b>pg/ml</b>	<b>Serum 1</b>	<b>Serum 2</b>	<b>Plasma 1</b>	<b>Plasma 2</b>
<b>1:5</b>	2780	2340	2495	2365
<b>1:10</b>	1105	991	923	1029
<b>1:20</b>	487	479	380	520
<b>1:40</b>	202	224	172	210
<b>2</b>	79%	85%	74%	87%
<b>4</b>	88%	97%	82%	101%
<b>8</b>	83%	93%	91%	81%

IL-13				
pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
1:5	147	154	261	197
1:10	87	98	130	114
1:20	54	58	69	74
1:40	31	35	37	37
2	119%	128%	100%	116%
4	124%	119%	106%	130%
8	115%	118%	108%	101%

IL-2				
pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
1:5	65	57	55	49
1:10	24	23	22	22
1:20	11	11	9.2	12
1:40	5.0	5.5	4.1	4.9
2	76%	80%	81%	88%
4	88%	96%	83%	108%
8	93%	102%	90%	84%

IL-4				
pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
1:5	32	29	32	32
1:10	16	15	16	17
1:20	8.8	8.4	7.8	10
1:40	4.0	4.3	3.9	4.1
2	99%	102%	100%	110%
4	112%	114%	97%	114%
8	91%	104%	101%	84%

IL-5				
pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
1:5	617	511	547	340
1:10	245	201	198	219
1:20	91	81	73	127
1:40	38	33	30	65
2	79%	79%	72%	129%
4	74%	81%	74%	116%
8	84%	82%	82%	102%

IL-6				
pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
1:5	41	30	36	30
1:10	17	13	13	13
1:20	7.4	6.0	6.1	7.6
1:40	3.1	2.9	2.6	2.8
2	81%	85%	73%	89%
4	88%	94%	92%	115%
8	85%	98%	84%	73%

KC/GRO				
pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
1:5	38	1075	238	741
1:10	18	688	154	473
1:20	8.0	430	90	256
1:40	4.6	250	46	140
2	92%	128%	130%	128%
4	91%	125%	116%	108%
8	114%	116%	103%	109%

TNF $\alpha$				
pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
1:5	76	50	58	48
1:10	36	23	27	27
1:20	18	14	14	16
1:40	8.9	7.3	6.9	8.1
2	95%	94%	93%	112%
4	97%	117%	104%	120%
8	101%	107%	100%	101%

**Freeze/thaw stability:** Samples were assessed for freeze-thaw stability after 1, 2, and 3 F/T cycles. All values were within the acceptance range of 80-120% for freeze-thaw samples compared to the non-freeze thawed samples indicating that samples could be freeze-thawed up to 3 times without a loss in signal.

		IFN $\gamma$			
		pg/ml			
		Serum 1	Serum 2	Plasma 1	Plasma 2
Value	FT-0X	852	776	880	674
	FT-1X	908	750	891	704
	FT-2X	953	819	897	746
	FT-3X	731	712	824	672
% Control	FT-0X	100%	100%	100%	100%
	FT-1X	107%	97%	101%	105%
	FT-2X	112%	106%	102%	111%
	FT-3X	86%	92%	94%	100%

		IL-1 $\alpha$			
		pg/ml			
		Serum 1	Serum 2	Plasma 1	Plasma 2
Value	FT-0X	966	755	906	887
	FT-1X	945	710	890	888
	FT-2X	989	727	904	945
	FT-3X	808	635	794	813
% Control	FT-0X	100%	100%	100%	100%
	FT-1X	98%	94%	98%	100%
	FT-2X	102%	96%	100%	107%
	FT-3X	84%	84%	88%	92%

		IL-1 $\beta$			
		pg/ml			
		Serum 1	Serum 2	Plasma 1	Plasma 2
Value	FT-0X	8725	7340	6965	7390
	FT-1X	9900	7125	7090	7695
	FT-2X	9985	7490	7185	7810
	FT-3X	7740	6810	6670	7200
% Control	FT-0X	100%	100%	100%	100%
	FT-1X	113%	97%	102%	104%
	FT-2X	114%	102%	103%	106%
	FT-3X	89%	93%	96%	97%



		<b>IL-10</b>				
		<b>pg/ml</b>	<b>Serum 1</b>	<b>Serum 2</b>	<b>Plasma 1</b>	<b>Plasma 2</b>
Value	FT-0X		1685	1445	2080	1435
	FT-1X		1760	1425	2050	1440
	FT-2X		1780	1460	2120	1495
	FT-3X		1515	1285	1970	1400
% Control	FT-0X		100%	100%	100%	100%
	FT-1X		104%	99%	99%	100%
	FT-2X		106%	101%	102%	104%
	FT-3X		90%	89%	95%	98%

		<b>IL-12p40</b>				
		<b>pg/ml</b>	<b>Serum 1</b>	<b>Serum 2</b>	<b>Plasma 1</b>	<b>Plasma 2</b>
Value	FT-0X		1430	1210	2095	1625
	FT-1X		1445	1175	2120	1760
	FT-2X		1440	1180	2260	1745
	FT-3X		1360	1085	2120	1640
% Control	FT-0X		100%	100%	100%	100%
	FT-1X		101%	97%	101%	108%
	FT-2X		101%	98%	108%	107%
	FT-3X		95%	90%	101%	101%

		<b>IL-12p70</b>				
		<b>pg/ml</b>	<b>Serum 1</b>	<b>Serum 2</b>	<b>Plasma 1</b>	<b>Plasma 2</b>
Value	FT-0X		9665	8300	9440	8195
	FT-1X		10300	8165	9330	8490
	FT-2X		10885	8730	9330	8920
	FT-3X		8925	7960	9200	8180
% Control	FT-0X		100%	100%	100%	100%
	FT-1X		107%	98%	99%	104%
	FT-2X		113%	105%	99%	109%
	FT-3X		92%	96%	97%	100%

		<b>IL-13</b>				
		<b>pg/ml</b>	<b>Serum 1</b>	<b>Serum 2</b>	<b>Plasma 1</b>	<b>Plasma 2</b>
Value	FT-0X		121	34	181	26
	FT-1X		118	34	191	25
	FT-2X		121	43	192	27
	FT-3X		123	35	188	29
% Control	FT-0X		100%	100%	100%	100%
	FT-1X		98%	100%	105%	98%
	FT-2X		100%	127%	106%	105%
	FT-3X		101%	103%	104%	111%

		IL-2				
		pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	FT-0X		965	768	938	768
	FT-1X		1028	758	940	747
	FT-2X		1067	796	958	791
	FT-3X		825	711	915	703
% Control	FT-0X		100%	100%	100%	100%
	FT-1X		106%	99%	100%	97%
	FT-2X		111%	104%	102%	103%
	FT-3X		85%	93%	98%	92%

		IL-4				
		pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	FT-0X		665	550	679	655
	FT-1X		679	524	710	669
	FT-2X		709	554	706	690
	FT-3X		576	504	677	634
% Control	FT-0X		100%	100%	100%	100%
	FT-1X		102%	95%	105%	102%
	FT-2X		107%	101%	104%	105%
	FT-3X		87%	92%	100%	97%

		IL-5				
		pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	FT-0X		1380	1035	1230	1190
	FT-1X		1465	1070	1240	1195
	FT-2X		1435	1120	1315	1260
	FT-3X		1265	970	1220	1125
% Control	FT-0X		100%	100%	100%	100%
	FT-1X		106%	103%	101%	100%
	FT-2X		104%	108%	107%	106%
	FT-3X		92%	94%	99%	95%

		IL-6				
		pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	FT-0X		2130	1610	2280	1940
	FT-1X		2255	1570	2360	1900
	FT-2X		2280	1695	2425	2020
	FT-3X		1725	1395	2275	1805
% Control	FT-0X		100%	100%	100%	100%
	FT-1X		106%	98%	104%	98%
	FT-2X		107%	105%	106%	104%
	FT-3X		81%	87%	100%	93%

	KC/GRO				
	pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	FT-0X	1390	1415	2030	1710
	FT-1X	1455	1385	2020	1650
	FT-2X	1585	1520	2105	1715
	FT-3X	1195	1300	1950	1575
% Control	FT-0X	100%	100%	100%	100%
	FT-1X	105%	98%	100%	96%
	FT-2X	114%	107%	104%	100%
	FT-3X	86%	92%	96%	92%

	TNF $\alpha$				
	pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	FT-0X	1115	836	929	748
	FT-1X	1099	813	979	763
	FT-2X	1129	816	974	755
	FT-3X	965	756	951	715
% Control	FT-0X	100%	100%	100%	100%
	FT-1X	99%	97%	105%	102%
	FT-2X	101%	98%	105%	101%
	FT-3X	87%	90%	102%	96%

**6. Bench Top Stability:** Samples were assessed bench top stability and 2hr RT, and 2 & 4Hr 4°C to determine if the samples were stable on the bench prior to the assay or if refrigeration was required. All values were within the acceptance range of 80-120% for samples compared to the bench top samples indicating that no loss in activity will occur during the testing of the samples, with the exception of IL-13 at 2 hr RT. Samples are kept on ice during processing to avoid any loss of signal.

	IFN $\gamma$				
	pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	0 HR	5068	4373	4920	747
	2hr RT	5280	4561	5205	701
	2hr 4C	5439	4677	5169	880
	4hr 4C	4764	4682	4951	735
% Control	0 HR	100%	100%	100%	100%
	2hr RT	104%	104%	106%	94%
	2hr 4C	107%	107%	105%	118%
	4hr 4C	94%	107%	101%	98%

		IL-1 $\alpha$				
		pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	0 HR		883	733	932	1019
	2hr RT		775	561	664	756
	2hr 4C		881	741	871	1007
	4hr 4C		769	670	741	953
% Control	0 HR		100%	100%	100%	100%
	2hr RT		88%	76%	71%	74%
	2hr 4C		100%	101%	93%	99%
	4hr 4C		87%	91%	79%	94%

		IL-1 $\beta$				
		pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	0 HR		8165	7510	7360	8230
	2hr RT		7970	7225	7720	7520
	2hr 4C		8530	8620	7455	9095
	4hr 4C		7880	8640	7090	7545
% Control	0 HR		100%	100%	100%	100%
	2hr RT		98%	96%	105%	91%
	2hr 4C		104%	115%	101%	111%
	4hr 4C		97%	115%	96%	92%

		IL-10				
		pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	0 HR		1535	1430	2115	1505
	2hr RT		1450	1345	1920	1380
	2hr 4C		1580	1550	2050	1565
	4hr 4C		1475	1450	1965	1425
% Control	0 HR		100%	100%	100%	100%
	2hr RT		94%	94%	91%	92%
	2hr 4C		103%	108%	97%	104%
	4hr 4C		96%	101%	93%	95%

		IL-12p40				
		pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	0 HR		1350	1265	2335	1820
	2hr RT		1340	1190	2275	1730
	2hr 4C		1425	1165	2210	1800
	4hr 4C		1310	1155	2250	1730
% Control	0 HR		100%	100%	100%	100%
	2hr RT		99%	94%	97%	95%
	2hr 4C		106%	92%	95%	99%
	4hr 4C		97%	91%	96%	95%

		<b>IL-12p70</b>				
		<b>pg/ml</b>	<b>Serum 1</b>	<b>Serum 2</b>	<b>Plasma 1</b>	<b>Plasma 2</b>
Value	0 HR		9380	8865	10050	9055
	2hr RT		9470	8445	10025	8705
	2hr 4C		10550	9920	9530	10165
	4hr 4C		8455	9805	9045	8760
% Control	0 HR		100%	100%	100%	100%
	2hr RT		101%	95%	100%	96%
	2hr 4C		112%	112%	95%	112%
	4hr 4C		90%	111%	90%	97%

		<b>IL-13</b>				
		<b>pg/ml</b>	<b>Serum 1</b>	<b>Serum 2</b>	<b>Plasma 1</b>	<b>Plasma 2</b>
Value	0 HR		134	33	194	26
	2hr RT		94	32	121	26
	2hr 4C		102	31	141	28
	4hr 4C		105	32	146	28
% Control	0 HR		100%	100%	100%	100%
	2hr RT		70%	95%	63%	97%
	2hr 4C		76%	92%	73%	105%
	4hr 4C		78%	95%	75%	108%

		<b>IL-2</b>				
		<b>pg/ml</b>	<b>Serum 1</b>	<b>Serum 2</b>	<b>Plasma 1</b>	<b>Plasma 2</b>
Value	0 HR		877	811	959	822
	2hr RT		918	812	984	723
	2hr 4C		953	981	980	905
	4hr 4C		824	962	929	728
% Control	0 HR		100%	100%	100%	100%
	2hr RT		105%	100%	103%	88%
	2hr 4C		109%	121%	102%	110%
	4hr 4C		94%	119%	97%	89%

		<b>IL-4</b>				
		<b>pg/ml</b>	<b>Serum 1</b>	<b>Serum 2</b>	<b>Plasma 1</b>	<b>Plasma 2</b>
Value	0 HR		595	553	692	713
	2hr RT		613	561	699	665
	2hr 4C		637	627	716	777
	4hr 4C		585	594	668	689
% Control	0 HR		100%	100%	100%	100%
	2hr RT		103%	102%	101%	93%
	2hr 4C		107%	113%	103%	109%
	4hr 4C		98%	107%	97%	97%
		<b>IL-5</b>				

	pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	0 HR	1320	1160	1325	1285
	2hr RT	1260	1095	1275	1210
	2hr 4C	1425	1225	1290	1380
	4hr 4C	1255	1190	1225	1200
% Control	0 HR	100%	100%	100%	100%
	2hr RT	95%	94%	96%	94%
	2hr 4C	108%	106%	97%	107%
	4hr 4C	95%	103%	92%	93%

	IL-6				
	pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	0 HR	1820	1640	2320	2070
	2hr RT	1855	1695	2225	1920
	2hr 4C	1995	1860	2415	2390
	4hr 4C	1695	1895	2345	1895
% Control	0 HR	100%	100%	100%	100%
	2hr RT	102%	103%	96%	93%
	2hr 4C	110%	113%	104%	115%
	4hr 4C	93%	116%	101%	92%

	KC/GRO				
	pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	0 HR	1290	1440	2050	1785
	2hr RT	1215	1355	1940	1650
	2hr 4C	1325	1730	2050	2005
	4hr 4C	1190	1750	1935	1625
% Control	0 HR	100%	100%	100%	100%
	2hr RT	94%	94%	95%	92%
	2hr 4C	103%	120%	100%	112%
	4hr 4C	92%	122%	94%	91%

	TNF $\alpha$				
	pg/ml	Serum 1	Serum 2	Plasma 1	Plasma 2
Value	0 HR	984	807	944	815
	2hr RT	1035	854	1020	740
	2hr 4C	1085	883	1010	811
	4hr 4C	904	884	952	778
% Control	0 HR	100%	100%	100%	100%
	2hr RT	105%	106%	108%	91%
	2hr 4C	110%	109%	107%	100%
	4hr 4C	92%	109%	101%	95%