



6459 State Route 30 Lake Clear, NY 12945 Phone: 518.891.0204

HAMSTER CYTOKINE PANEL 1 (9-PLEX)

CERTIFICATE OF ANALYSIS

(Part ID: H101-K; Lot ID: K22608)

Use

For the detection of 9 hamster cytokines/chemokines (**IL-10, IL-2, IL-4, IL-6, IFN γ , MCP-1, MIP-1 α , TNF α & VEGF**) in serum, plasma, tissue homogenates, and bronchial lavage.

Kit Components

Note:

Kit Components			
Kit Component	Part Number	Lot Number	Number Supplied
Hamster MAP 1 Beads	H101-B	K22609	1
Hamster MAP 1 Detection	H101-D	K22658	1
Hamster MAP 1 Standard	H101-S	K22659	1
Hamster MAP 1 Control 1	H101-C1	K22612	1
Hamster MAP 1 Control 2	H101-C2	K22613	1
Standard Curve Diluent	H101-SCD	K22614	1
Blocking Buffer	H101-BL	K22615	1
Streptavidin-PE	SAPE4-250	K22657	1
Sample Diluent	B116-15	K22668	1
Assay Buffer 10X	B100-25	K22645	1
Clear Bottom Black Assay Plate	NA	NA	1

Storage and Stability

Store kit at 2°C - 8°C.

Expiration Date: 1 year from date of receipt; Do not use beyond the expiration date

Standard Concentrations:

Standard Level	IFN γ [pg/mL]	IL-10 [pg/mL]	IL-2 [pg/mL]	IL-4 [pg/mL]	IL-6 [pg/mL]	MCP-1 [pg/mL]	MIP-1 α [pg/mL]	TNF α [pg/mL]	VEGF [pg/mL]
S8	22000	9000	2500	5600	8600	3000	25000	4000	825
S7	6286	2571	714	1600	2457	857	7143	1143	236
S6	1796	735	204	457	702	245	2041	327	67
S5	513	210	58	131	201	70	583	93	19
S4	147	60	17	37	57	20	167	27	5.5
S3	42	17	4.8	11	16	5.7	48	7.6	1.6
S2	12	4.9	1.4	3.0	4.7	1.6	14	2.2	0.45
S1	3.4	1.4	0.39	0.87	1.3	0.47	3.9	0.62	0.13

Control Ranges:

Control	Range	IFN γ [pg/mL]	IL-10 [pg/mL]	IL-2 [pg/mL]	IL-4 [pg/mL]	IL-6 [pg/mL]	MCP-1 [pg/mL]	MIP-1 α [pg/mL]	TNF α [pg/mL]	VEGF [pg/mL]
1	Low	77	38	13	14	18	60	109	17	6.7
	High	231	113	40	42	53	181	328	52	20
2	Low	450	362	137	143	164	304	959	165	43
	High	1350	1086	410	429	491	913	2878	496	128

LDD: Determined by 8 replicates of background +2SD.

LDD	IFN γ [pg/mL]	IL-10 [pg/mL]	IL-2 [pg/mL]	IL-4 [pg/mL]	IL-6 [pg/mL]	MCP-1 [pg/mL]	MIP-1 α [pg/mL]	TNF α [pg/mL]	VEGF [pg/mL]
Without Dilution	4.7	11	1.0	3.2	1.6	0.66	4.6	0.84	0.20
With Dilution	23	57	4.9	16	8.1	3.3	23	4.2	1.0

Reference MFI Values:

Standard and control MFI values generated on a Luminex 200 instrument using the standard (low) PMT setting. Data represents the average MFI of multiple runs at Ampersand Biosciences.

Representative data, may vary by instrument

MFI	IFN γ	IL-10	IL-2	IL-4	IL-6	MCP-1	MIP-1 α	TNF α	VEGF
S8	6182	6891	6846	7441	11242	13756	7497	13822	14619
S7	4529	2927	3281	3363	7568	4999	4676	6299	5919
S6	1998	977	922	964	2916	1494	1833	2077	1648
S5	623	335	222	284	849	533	688	584	436
S4	212	147	70	102	250	224	263	197	140
S3	77	85	28	48	84	94	85	70	58
S2	41	70	16	32	39	53	36	34	35
S1	29	70	13	31	24	43	25	24	27
Control 1	187	153	96	75	136	802	277	216	272
Control 2	1051	938	1206	599	1354	3434	1770	2048	2102