

Q-Plex™ Mouse Cytokine Inflammation HS (14-Plex)

The Q-Plex Mouse Cytokine Inflammation HS (14-Plex) is a fully quantitative ELISA-based chemiluminescent assay allowing the concurrent measurement of fourteen biomarkers: IL-1α, IL-1β, IL-2, IL-3, IL-4, IL-6, IL-10, IL-12p70, IL-17a, MCP-1, TNFα, MIP-1α, GMCSF, RANTES.

Each kit contains a 96-well plate, featuring the relevant biomarker panel, and all the reagents required to perform testing. Q-Plex™ plates are built by absorbing fourteen distinct capture antibodies to the bottom of each well in a defined array. Our high quality reagents help ensure the accuracy of your results.

Catalog #	Product	GMCSF	IL-1α	IL-1β	IL-2
111049MS	Q-Plex™ Mouse Cytokine Inflammation HS (14-Plex)	IL-3	IL-4	IL-6	IL-10
		IL-12p70	IL-17a	MCP-1	TNFα
		MIP-1α	RANTES		

Product Range

Analyte	Assay Type	Calibrator Range	Upper Limit of Quantification (ULOQ)	Lower Limit of Quantification (LLOQ)	Limit of Detection	Precision* (Inter-assay)	Precision* (Intra-assay)	Average* Linearity
GMCSF	Sandwich	560 - 0.77 (pg/mL)	392 (pg/mL)	1 (pg/mL)	0.38 (pg/mL)	4.9%	7.5%	94%
IL-1α	Sandwich	610 - 0.84 (pg/mL)	427 (pg/mL)	1.1 (pg/mL)	0.42 (pg/mL)	3.3%	7.4%	108%
IL-1β	Sandwich	2500 - 3.43 (pg/mL)	1750 (pg/mL)	4.5 (pg/mL)	1.71 (pg/mL)	3.1%	9.3%	81%
IL-2	Sandwich	360 - 0.49 (pg/mL)	252 (pg/mL)	0.6 (pg/mL)	0.25 (pg/mL)	5.1%	6.6%	88%
IL-3	Sandwich	60 - 0.08 (pg/mL)	42 (pg/mL)	0.1 (pg/mL)	0.04 (pg/mL)	4.7%	7.0%	106%
IL-4	Sandwich	400 - 0.55 (pg/mL)	280 (pg/mL)	0.7 (pg/mL)	0.27 (pg/mL)	6.2%	6.6%	98%
IL-6	Sandwich	504 - 0.69 (pg/mL)	353 (pg/mL)	0.91 (pg/mL)	0.35 (pg/mL)	7.3%	6.1%	106%
IL-10	Sandwich	667 - 0.91 (pg/mL)	467 (pg/mL)	1.33 (pg/mL)	0.46 (pg/mL)	7.5%	3.0%	108%
IL-12p70	Sandwich	572 - 0.78 (pg/mL)	400 (pg/mL)	1.01 (pg/mL)	0.39 (pg/mL)	5.5%	10.8%	107%
IL-17a	Sandwich	760 - 1.04 (pg/mL)	532 (pg/mL)	1.4 (pg/mL)	0.52 (pg/mL)	6.5%	6.1%	92%
MCP-1	Sandwich	9400 - 12.89 (pg/mL)	6580 (pg/mL)	16.8 (pg/mL)	6.45 (pg/mL)	5.5%	9.2%	96%
MIP-1α	Sandwich	1000 - 1.37 (pg/mL)	700 (pg/mL)	1.8 (pg/mL)	0.69 (pg/mL)	10.9%	6.7%	86%
RANTES	Sandwich	1653 - 2.27 (pg/mL)	1157 (pg/mL)	2.92 (pg/mL)	1.13 (pg/mL)	5.0%	5.5%	108%
TNFα	Sandwich	429 - 0.59 (pg/mL)	300 (pg/mL)	0.69 (pg/mL)	0.29	6.9%	5.2%	104%

* Actual values may vary from kit to kit. Please see the In-Kit Certificate of Analysis included in your kit for specific values.

The Q-Plex™ Array

Spotting in 96 Well Plate

- ▶ Robotic liquid handlers print 20-50nL spots of capture antibody
- ▶ Each spot is a unique assay within the well
- ▶ Low spot-to-spot variability (CV)
- ▶ Spot size 350-500µm
- ▶ Plates are QC'd for spot quality

Performing the Assay

- ▶ Add as little as 25µL of sample
- ▶ Wash
- ▶ Add mix of detection antibodies specific to kit
- ▶ Wash
- ▶ Add streptavidin conjugated HRP

Detection of Sample

- ▶ With the addition of substrate, a response is produced
- ▶ If antigen is present the spot emits a signal proportional to the amount of antigen in the sample
- ▶ If no antigen is present, the spot is not visible

Image Capture

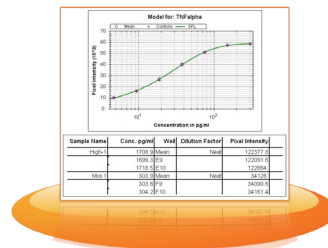
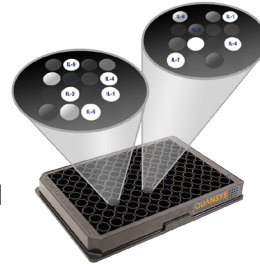
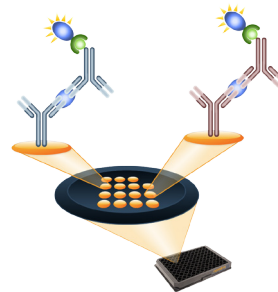
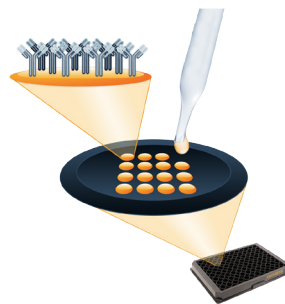
- ▶ An image of the plate is taken via a high resolution camera contained within the Q-View™ Imager LS

Image Analysis

- ▶ Image is opened in Q-View™ Software
- ▶ Spots are automatically found on plate image
- ▶ Intensity of spot response is measured and raw data is generated
- ▶ User imports product specs and well layout

Data Analysis

- ▶ Raw data is analyzed and compared to in-plate standard
- ▶ Regression models used to calculate unknowns
- ▶ Standard curves are calculated and sample and statistical data is exported



Increase productivity with Quansys products and services. Save time, sample, and money.

Q-Plex™ ARRAYS

Our Q-Plex Arrays are quantitative multiplex ELISAs with distinct proteins deposited in a defined array. Choose one of our standard kits for immediate delivery or customize the exact array you need.

Q-View™ IMAGERS

The Q-View™ Imager LS is a high quality, low-cost imaging systems for chemiluminescent assay imaging.

Q-View™ SOFTWARE

The Q-View Software is a user-friendly image analysis app that enables the acquisition and analysis of large amounts of multiplex ELISA data.

SAMPLE TESTING SERVICE

Our lab runs immunoassays on a wide variety of biological samples. Increase productivity and focus on your core research while we test your samples for you.



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