

## 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-1 $\alpha$ , IL-1 $\beta$ , IL-2, IL-3, IL-4, IL-6, IL-10, IL-12p70, IL-17, MCP-1, TNF $\alpha$ , MIP-1 $\alpha$ , 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.

Using just 50  $\mu$ L of sample per well, up to 80 samples can be assayed for all fourteen markers in the panel within 2.5 hours. The Q-Plex Mouse Cytokine Inflammation (14-Plex) provides researchers an easy to use and cost effective means of generating a cytokine profile for each sample.

### Mouse Cytokine Inflammation

Catalog #	Product	GMCSF	IL-1 $\alpha$	IL-1 $\beta$	IL-2
110451MS	Q-Plex™ Mouse Cytokine Inflammation HS (14-Plex)	IL-3	IL-4	IL-6	IL-10
		IL-12p70	IL-17	MCP-1	TNF $\alpha$
		MIP-1 $\alpha$	RANTES		

### Product Range

Analytes	Units	Range (pg/mL)	LLD (pg/mL)
GMCSF	pg/mL	2000 - 2.74	2.30
IL-1 $\alpha$	pg/mL	5000 - 6.86	4.20
IL-1 $\beta$	pg/mL	14000 - 19.20	12.41
IL-2	pg/mL	5000 - 6.86	3.44
IL-3	pg/mL	5000 - 6.86	3.18
IL-4	pg/mL	5000 - 6.86	2.50
IL-6	pg/mL	5000 - 6.86	2.90
IL-10	pg/mL	2000 - 2.75	3.00
IL-12p70	pg/mL	12000 - 16.46	12.20
IL-17	pg/mL	10000 - 13.72	6.20
MCP - 1	pg/mL	3000 - 4.12	3.40
MIP-1 $\alpha$	pg/mL	5000 - 6.86	0.61
RANTES	pg/mL	3000 - 4.12	2.15
TNF $\alpha$	pg/mL	3000 - 4.12	3.40

\* 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

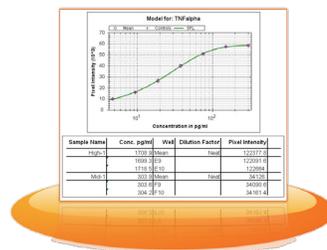
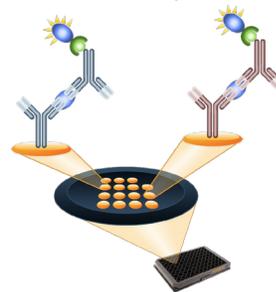
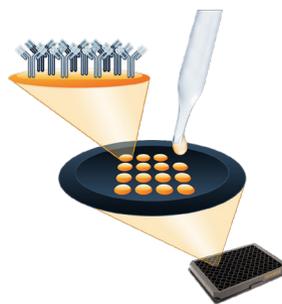
- ▶ An image of the plate is taken via a high resolution camera contained within the Q-View™ Imager LS

## 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



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## 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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Quansys is an ISO 9001:2015 and ISO 13485:2016 registered company and complies with cGMP. Products are designed, developed, and manufactured according to the procedures outlined in our Quality Management System.

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