

## Q-Plex™ Rat Cytokine Inflammation (9-Plex)

The Q-Plex Rat Cytokine Inflammation (9-Plex) is a fully quantitative ELISA-based chemiluminescent assay allowing the concurrent measurement of nine biomarkers or analytes (IL-1α, IL-1β, IL-2, IL-4, IL-6, IL-10, IL-12p70, IFNγ, TNFα).

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 nine distinct capture antibodies in a defined array to the bottom of each well. Our high quality reagents help ensure the accuracy of your results.

Using just 50 µL of sample per well, up to 80 samples can be assayed for all nine markers in the panel within 3 hours. Q-Plex™ Arrays provide researchers with an easy-to-use and cost effective means of generating a cytokine profile for each sample.

### Human Infrared Kit

Catalog #	Product	Markers			
111649RT	Q-Plex™ Rat Cytokine Inflammation (9-Plex)	IFNγ IL-4 TNFα	IL-1α IL-6	IL-1β IL-10	IL-2 IL-12p70

### Product Range

	Units	Calibrator Range	LLD Limit
IFNγ	pg/mL	6000 - 8.2	5.3
IL-1α	pg/mL	5400 - 7.4	4.8
IL-1β	pg/mL	3200 - 4.4	2.9
IL-2	pg/mL	9800 - 13.4	8.7
IL-4	pg/mL	4000 - 5.5	3.6
IL-6	pg/mL	83000 - 113.9	74.0
IL-10	pg/mL	14000 - 19.2	12.5
IL-12p70	pg/mL	92000 - 126.2	82.0
TNFα	pg/mL	37000 - 50.8	33.0

\* Actual values may vary from kit to kit. Please see the antigen card 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 50µL of sample
- ▶ Wash
- ▶ Add mix of detection antibodies specific to kit
- ▶ Wash
- ▶ Add streptavidin conjugated HRP or IR-Dye

## 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

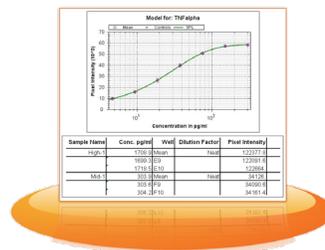
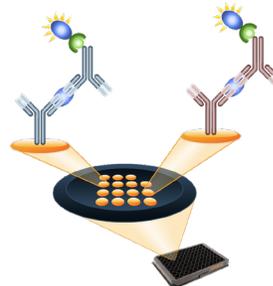
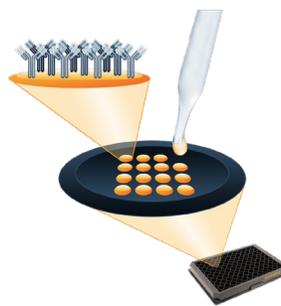
- ▶ An image of the plate is taken via a high resolution camera (Q-View Imager Pro, Q-View Imager LS or approved gel doc system) or fluorescent scanner (LI-COR Odyssey)
- ▶ The image file (TIFF) is imported into Q-View Software and a Q-View Project is created

## 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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