QUANSYS BIOSCIENCES

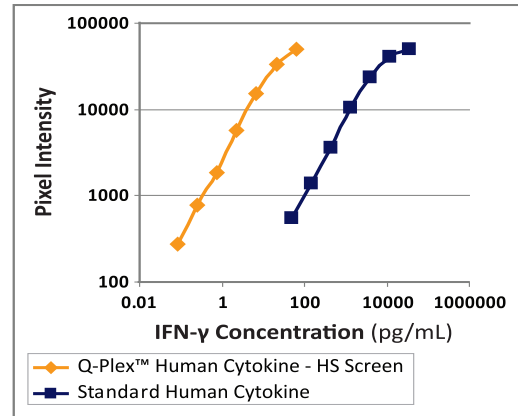# Q-Plex™ High Sensitivity Human Cytokine Array (9-Plex)

A Q-Plex Kit For Measuring Low Cytokine Concentrations

The Q-Plex™ Human Cytokine - HS Screen (9-Plex) is a fully quantitative multiplexed ELISA kit for researchers looking to measure low concentrations of human cytokines. These chemiluminescent assays allow for the concurrent measurement of IL-1α, IL-1β, IL-4, IL-5, IL-6, IL-10, IL-17, IFN-γ, TNF-α.

HS kits contain a 96-well plate and the optimized reagents required to perform testing. Each well of the included plate features a defined array of unique capture antibodies for the nine markers in the panel. Requiring only 50 µL, Q-Plex kits provide an efficient means of generating an accurate cytokine profile for each sample.

Quantifiable concentrations of IFN-γ demonstrate enhanced sensitivity of Q-Plex Human Cytokine - HS Screen

Human High Sensitivity Kits

Catalog #	Product	Markers			
112451HU 112449HU*	Q-Plex™ Human Cytokine - HS Screen (15-plex)	IL-1α IL-1β IL-2 IL-4	IL-5 IL-6 IL-10 IL-12p70	IL-13 IL-15 IL-17 IL-23	IFN-γ TNF-α TNF-β
114449HU 114451HU*	Q-Plex™ Human Cytokine - HS (9-plex)	IL-1α IL-1β IL-4	IL-5 IL-6 IL-10	IL-17 IFN-γ TNF-α	
112551HU	Q-Plex™ Human Cytokine - HS Demo (4-plex)	IL-4	IL-6	IL-10	IFN-γ

*For use with Quansys Imagers only

Product Range

	Units	Range (pg/mL)	LLD (pg/mL)
IFN-γ	pg/ml	80 - 0.11	0.10
IL-1α	pg/ml	1300 - 1.78	1.4
IL-1β	pg/ml	3070 - 4.21	1.75
IL-4	pg/ml	23 - 0.03	0.02
IL-5	pg/ml	360 - 0.49	0.2
IL-6	pg/ml	350 - 0.48	0.40
IL-10	pg/ml	950 - 1.30	1.10
IL-17	pg/ml	1200 - 1.65	1.48
TNFα	pg/ml	440 - 0.60	0.31

† 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
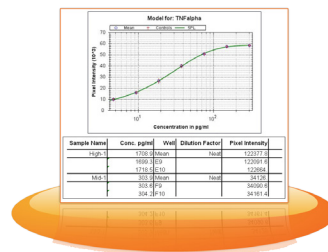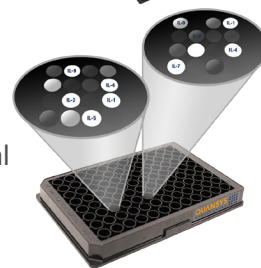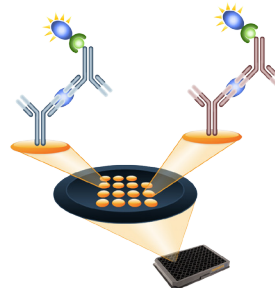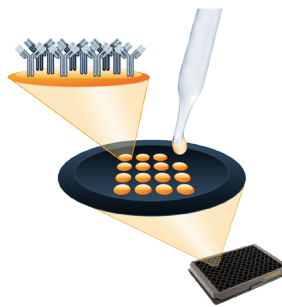▶ If no antigen is present, the spot is not visible

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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Quansys is an ISO 9001:2008 and ISO 13485:2003 registered company and complies with cGMP. Products are designed, developed, and manufactured according to the procedures outlined in our Quality Management System.

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 Pro and Q-View Imager LS are 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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