

## Q-Plex™ Human MMP (6-Plex)

The Q-Plex Human MMP (6-Plex) is a fully quantitative ELISA-based chemiluminescent assay. This kit allows for the concurrent measurement of six matrix metalloproteinases (MMPs). MMPs are an important enzyme in cell biology, involved in cleaving extracellular matrix and cell surface receptor proteins (such as cytokines, chemokines and apoptotic ligands). The specific markers/analytes included in this kit are: MMP-1, MMP-2, MMP-3, MMP-7, MMP-9 and MMP-13.

Each Human MMP (6-Plex) kit contains a preprinted 96-well plate and all reagents required to perform testing. Q-Plex™ plates are built by absorbing 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 six MMPs in approximately 3 hours. Q-Plex™ Arrays provide researchers with an easy-to-use and cost effective means of generating an MMP profile for each sample.

Catalog #	Product	Markers
340951HU	Q-Plex Human MMP (6-Plex)	MMP-1    MMP-2    MMP-3 MMP-7    MMP-9    MMP-13

## 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
MMP-1	Sandwich	12,000 – 16.5 (pg/mL)	8,400 (pg/mL)	64.2 (pg/mL)	8.2 (pg/mL)	12%	6%	87%
MMP-2	Sandwich	35,000 – 48.0 (pg/mL)	24,500 (pg/mL)	187.2 (pg/mL)	24.0 (pg/mL)	13%	7%	100%
MMP-3	Sandwich	80,000 – 109.7 (pg/mL)	56,00 (pg/mL)	428.0 (pg/mL)	54.9 (pg/mL)	11%	9%	105%
MMP-7	Sandwich	4,500 – 6.2 (pg/mL)	3,150 (pg/mL)	24.1 (pg/mL)	3.1 (pg/mL)	9%	6%	97%
MMP-9	Sandwich	1,800 – 2.5 (pg/mL)	1,260 (pg/mL)	9.6 (pg/mL)	1.2 (pg/mL)	14%	11%	98%
MMP-13	Sandwich	44,000 – 60.4 (pg/mL)	30,800 (pg/mL)	235.4 (pg/mL)	30.2 (pg/mL)	7%	7%	136%

\* 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 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

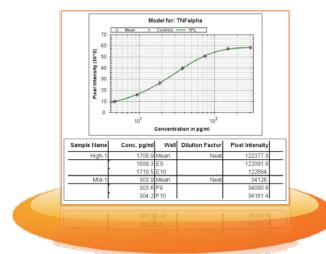
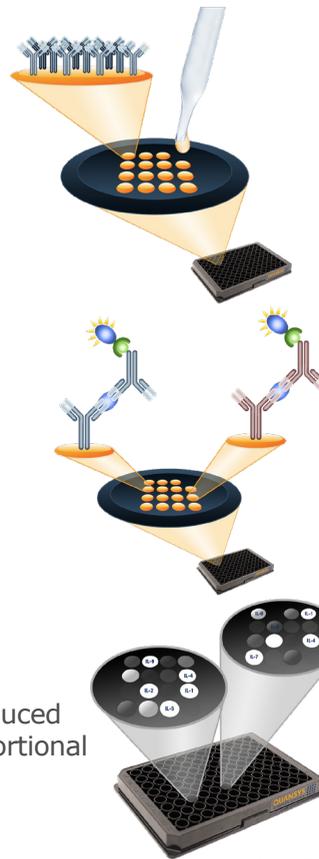
- ▶ An image of the plate is taken via a high resolution camera (Q-View Imager Pro, Q-View Imager LS or approved gel doc system) or fluorescent scanner (LI-COR Odyssey)
- ▶ The image file (TIFF) is imported into Q-View Software and a Q-View Project is created

## 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



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.



### Quansys Biosciences

365 North 600 West  
Logan, UT 84321  
www.quansysbio.com

Fax: 435-750-6869

Phone: 435-752-0531

Toll Free: 888-QUANSYS (782-6797)

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

©2022 Quansys Biosciences Inc. All rights reserved. Q-View and Q-Plex are Trademarks of Quansys Biosciences Inc. ISO is a trademark of the International Standards Organization. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details.

**QUANSYS**  
BIOSCIENCES



[www.quansysbio.com](http://www.quansysbio.com)