



## Background

The Q-Plex™ Human Cytokine Inflammation Panel 1 (9-Plex) is a fully quantitative ELISA-based chemiluminescent assay allowing the concurrent measurement of nine biomarkers or analytes: IFNγ, IL-1α, IL-1β, IL-2, IL-4, IL-6, IL-8, IL-10, and 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  $\mu$ L of sample per well, up to 80 samples can be assayed for all nine markers in the panel within 2.5 hours. Q-Plex<sup>TM</sup> Arrays provide researchers with an easy-to-use and cost effective means of generating a cytokine profile for each sample.

## Example Performance and Validation Data

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
IFNγ	Sandwich	8000 -10.97 (pg/mL)	5600 (pg/mL)	14.3 (pg/mL)	5.49 (pg/mL)	8%	4%	97%
IL-1a	Sandwich	4000 -5.49 (pg/mL)	2800 (pg/mL)	7.1 (pg/mL)	2.74 (pg/mL)	6%	7%	86%
IL-1β	Sandwich	12226 -16.77 (pg/mL)	8558 (pg/mL)	21.8 (pg/mL)	8.39 (pg/mL)	8%	5%	94%
IL-2	Sandwich	5213 - 7.15 (pg/mL)	3649 (pg/mL)	9.3 (pg/mL)	3.58 (pg/mL)	6%	4%	99%
IL-4	Sandwich	1676 – 2.30 (pg/mL)	1173 (pg/mL)	3.0 (pg/mL)	1.15 (pg/mL)	6%	6%	94%
IL-6	Sandwich	3000 - 4.12 (pg/mL)	2100 (pg/mL)	5.3 (pg/mL)	2.06 (pg/mL)	7%	4%	104%
IL-8	Sandwich	2000 – 2.74 (pg/mL)	1400 (pg/mL)	3.6 (pg/mL)	1.37 (pg/mL)	12%	7%	100%
IL-10	Sandwich	8039 - 11.03 (pg/mL)	5627 (pg/mL)	14.3 (pg/mL)	5.51 (pg/mL)	7%	5%	103%
TNFa	Sandwich	6500 – 8.92 (pg/mL)	4522 (pg/mL)	11.5 (pg/mL)	4.46 (pg/mL)	6%	5%	98%

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



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