Acute Phase Response
Cancer
Cardiovascular Disease
Cytokine, Chemokines, Growth Factors
Diabetes
Gene Expression
Genotyping
Immunoglobulin Isotyping
MicroRNA Expression
Signal Transduction
Toxicology

Bio-Plex® 3D Suspension Array System

AUTOMATION READY

Now with Bio-Plex Manager™ software version 6.0!*

* For analysis only.

- Improved Throughput
- Automation Friendly
- More analytes per well

Includes:
Bio-Plex Manager software version 6.0

The Bio-Plex 3D suspension array system is the next-generation multiplexing platform based on xMAP technology. Expanded multiplexing capability, faster time to results, and automation capability make it the platform of choice for high-throughput testing for nucleic acid and protein applications.

- Measurement of up to 500 unique analytes in a single sample
- 384-well plate capacity
- Plate read times twice as fast as the Bio-Plex/ Luminex 200 systems
- Robotics interfacing capabilities
- LIS-compatible software
- Compatible with magnetic and nonmagnetic assays
- Bio-Plex Manager software version 6.0 for data analysis
- Onsite training

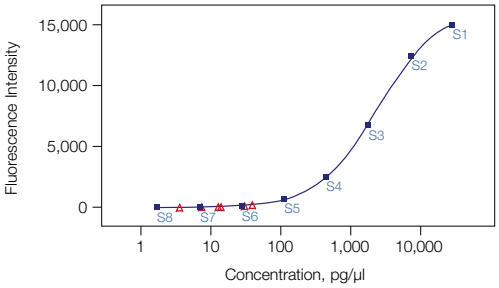
System Comparison

	Bio-Plex 200 System	Bio-Plex 3D System
Assay read time	35–40 min	<20 min
Multiplexing	Up to 100 analytes	Up to 500 analytes
Plate compatibility	96-well	96- or 384-well
Automation ready	Additional program required for integration	Yes

Assay Performance on Bio-Plex 3D and Bio-Plex 200 Systems Is Highly Comparable

Figure 1 is a representative assay from Bio-Plex Pro™ human 27-plex group I cytokine assays tested on both systems. It shows the standard curve comparison when the same assay is run on Bio-Plex 200 and Bio-Plex 3D systems. The standard curves have similar shapes and slopes. The samples (Δ) fall within the same region of both standard curves.

A. Bio-Plex 200 system



B. Bio-Plex 3D system

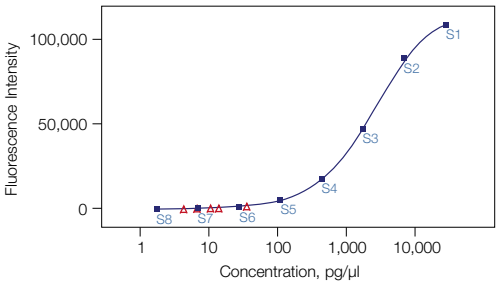


Fig. 1. Human 27-plex standard curves with samples of unknown concentrations, generated using the two systems. Values are shown for IL-6. Curves were generated using Bio-Plex Manager 6.0 software.

BIO-RAD

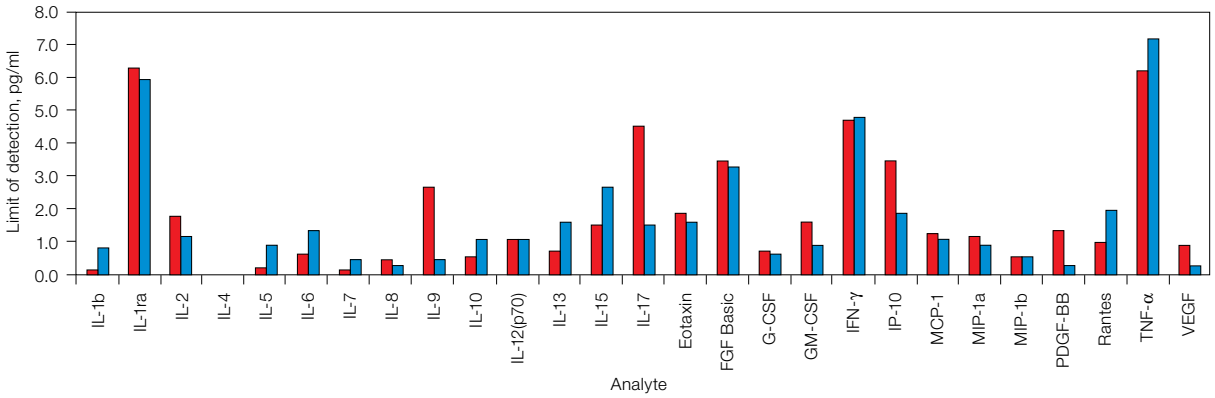


Fig. 2. LOD of Bio-Plex Pro human 27-plex group I cytokine assay using Bio-Plex 200 and Bio-Plex 3D systems. ■, Bio-Plex 200 system; ■, Bio-Plex 3D system (values are the mean of 3 independent assays).

Assay sensitivity or limit of detection (LOD) is defined as the concentration corresponding to the minimum median fluorescence intensity (MFI) value that can be reliably differentiated from background and is two standard deviations above the appropriate blank values. Figure 2 demonstrates that the sensitivity of most of the analytes in human 27-plex assay is comparable on the two systems. All the values were <8 pg/ml.

Figure 3 depicts the concentrations of samples from a representative assay analyzed using Bio-Plex 200 and Bio-Plex 3D systems. The concentration values were the same for all the samples tested with Bio-Plex Pro human 27-plex group I cytokines. Values are shown for IL-6.

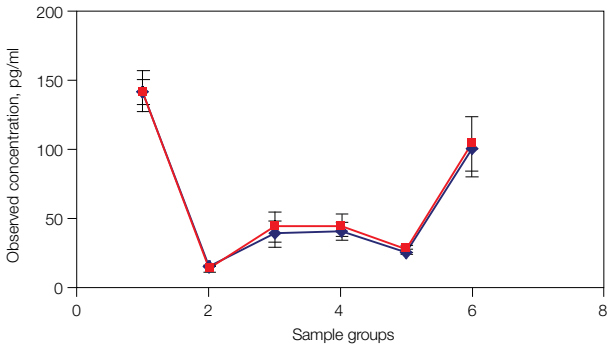


Fig. 3. Sample concentrations using the two systems. Values are shown for IL-6. ◆, Bio-Plex 3D system; ■, Bio-Plex 200 system.

High-Throughput Applications

The Bio-Plex 3D system was developed to meet the needs of the high-throughput laboratory. Design features that significantly reduce run time include rapid reading times, an automation-compatible tray design, and software that is compatible with both LIS and robotics systems.

Test*	Read Time**, min	Tests/hour
96-well (100-plex)	18	32,000
384-well (100-plex)	75	30,700
96-well (500-plex)	45	64,000
384-well (500-plex)	135	85,000

* 50 µl well volume: 2,500 beads per well.
**Read times measured across 4 instruments. Actual results may vary.

Ordering Information

Catalog #	Description
Bio-Plex 3D	**Bio-Plex 3D System**, includes Bio-Plex 3D suspension array system, xPONENT 4.0 acquisition software, PC, calibration reagents, verification reagents, Bio-Plex Manager software 6.0, desktop license
89-20185-00-001*	**xPONENT CFR21 Part 11 Software Module**, software module to enable CFR21 Part 11 compliance
89-20187-00-001*	**xPONENT Automation Module**, software module to enable interfacing with robotics workstations
171-022001*	**Swivel Base**, swivel mounting to allow maintenance rotation of instrument to face robotics workstation as well as to face forward for maintenance and manual loading
89-20186-00-001*	**xPONENT LIS Software Module**, software module to enable interfacing with LIS (Laboratory Information Systems) databases
89-20182-00-001*	**xPONENT Extra Seat Licenses (3 seats)**, 3 additional seats of xPONENT software

* All additional accessories may be purchased through Bio-Rad Laboratories, Inc. at the time of system purchase. Post system purchase, accessories must be purchased directly through Luminex Corporation.

For more information, go to **www.bio-rad.com/Bio-Plex3D**.

The Bio-Plex suspension array system includes fluorescently labeled microspheres and instrumentation licensed to Bio-Rad Laboratories, Inc. by the Luminex Corporation.

BIO-RAD

Bio-Rad Laboratories, Inc.

Life Science Group

Web site *www.bio-rad.com* ***USA*** *800 424 6723* ***Australia*** *61 2 9914 2800* ***Austria*** *01 877 89 01* ***Belgium*** *09 385 55 11* ***Brazil*** *55 31 3689 6600* ***Canada*** *905 364 3435* ***China*** *86 20 8732 2339* ***Czech Republic*** *420 241 430 532* ***Denmark*** *44 52 10 00* ***Finland*** *09 804 22 00* ***France*** *01 47 95 69 65* ***Germany*** *089 31 884 0* ***Greece*** *30 210 777 4396* ***Hong Kong*** *852 2789 3300* ***Hungary*** *36 1 459 6100* ***India*** *91 124 4029300* ***Israel*** *03 963 6050* ***Italy*** *39 02 216091* ***Japan*** *03 6361 7000* ***Korea*** *82 2 3473 4460* ***Mexico*** *52 555 488 7670* ***The Netherlands*** *0318 540666* ***New Zealand*** *0508 805 500* ***Norway*** *23 38 41 30* ***Poland*** *48 22 331 99 99* ***Portugal*** *351 21 472 7700* ***Russia*** *7 495 721 14 04* ***Singapore*** *65 6415 3188* ***South Africa*** *27 861 246 723* ***Spain*** *34 91 590 5200* ***Sweden*** *08 555 12700* ***Switzerland*** *061 717 95 55* ***Taiwan*** *886 2 2578 7189* ***United Kingdom*** *020 8328 2000*