Title:

Multiplex array reader

Sub-title:

Bio-Rad Bio-Plex 200 System: suspension array reader to analyze up to 100 biomolecules in a single sample.

General description:

The Bio-Plex 200 system is a flow cytometry–based instrument with 2 lasers and associated optics to measure different molecules bound to the surface of beads on the same sample. Fluorescence data are efficiently managed by a high-speed digital signal processor. The concentration (pg/ml) of analyte bound to each bead is proportional to the median fluorescence intensity of reporter signal.

Features:

- Microplate platform automates the reading of 96-well plates in about 35 min
- Multiple reading of biological signals (e.g. chemokines or cytokines) simultaneously on the same sample
- Sheath flow rate: 90 µl/sec
- Sample injection rates: 60 µl/sec
- Reporter channel detection: photomultiplier tube, A/D resolution 14 bits
- Classification and doublet discriminator channel detection: avalanche photodiodes with temperature compensation, A/D resolution 12 bits
- Reporter laser: 532 nm, >10 mW, frequency-doubled diode; 30 x 60 µm elliptical beam
- Classification laser: 635 nm, 10 mW, diode; 30 x 60 µm elliptical beam
- From multiplex assay to results in as little as 3 hours

Applications:

- Different sample types ranging from serum, urine, plasma
- Immunoassays
- Receptor-ligand assays
- Nucleic acid hybridization assays
- Enzyme assays