Bio-Plex Pro Multiplex Immunoassays:

Tools for Biomarker Discovery and Therapeutic Research and Development

Visit bio-rad.com/BioPlexBiopharma for more information.
Bio-Plex Pro Multiplex Immunoassays

Use Bio-Plex Pro Assays, Instruments, and Software in early drug discovery, from target and biomarker screening all the way through to clinical trials. Whether you want to cast a wide net with a large screening panel or narrow down to only a handful of key assays, Bio-Plex products are offered in flexible configurations verified and validated for specificity, sensitivity, accuracy, and reproducibility, and with a wide dynamic range.

- Save precious time and sample while generating actionable results in <3 hours
- Streamline data analysis with Bio-Plex Manager Software’s standard curve auto-optimization and assess relevant differences across multiple analytes and sample types quickly with Bio-Plex Data Pro Software
- Have confidence in your results with high-quality Bio-Plex Pro Assays manufactured in an ISO 13485:2016-certified facility
- Assess instrument performance with Installation Qualification and Operational Qualification performed by a field service engineer and validation and calibration tools provided for routine laboratory use

Increase Efficiency
Discover more in less time with multiplex immunoassays. Bio-Plex Assays utilize beads with unique spectral addresses determined by their dye ratios. These beads are coupled to capture antibodies, then serially incubated with samples, detection antibodies, and a fluorescent reporter, enabling measurement of up to 100 different proteins in one well in less than 3 hours.

Learn more.
**Bio-Plex Multiplex System**

| 1 96-well plate | ~3 hours | ≤12.5 μl serum or plasma | 50 μl cell culture supernatant |

**What Would it Take to Measure:**

\[
48 \text{ cytokines} \times 38 \text{ samples} = 1,824 \text{ data points}
\]

**Enzyme-Linked Immunosorbent Assay (ELISA)**

- 48 96-well plates
- >106 hours
- >1 ml serum or plasma
- >1 ml cell culture supernatant

**Use Less Sample and Time**

Measure multiple proteins using as little as 10 μl of precious sample. This reduces the number of plates, reagents, and overall time to results, thereby removing confounding variables that affect data quality.

Learn more.

**Built-In Quality**

Bio-Plex Assays are developed using SMARTS design, which builds in quality from material procurement to verification and validation of highly specific, sensitive, and reproducible assays. High sample detectability in relevant matrices enables actionable results.

Learn more.

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<tr>
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<tr>
<td>Sensitivity</td>
<td>Optimized to detect low-level endogenous analytes.</td>
<td>Multiplexibility</td>
<td>Rigorous cross-reactivity testing ensures panels include only highly specific assays.</td>
<td>Actionable Results</td>
<td>Accurate and precise assays with biologically relevant working ranges.</td>
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**Assay Search Function**

Identify your assay of interest in different panels for human, mouse, rat, and multiple species studied in immunology, inflammation, cell signaling, and disease research.

Learn more.

**Analyte Guide**

Reference assay and panel performance parameters along with sample data.

Learn more.

**Flexible Formats**

Only want to measure 7 of those 48 targets? Enjoy the flexibility of configuring your own set of targets in a panel. Build a custom assay or choose ready-to-order singleplex assays to mix yourself.

Learn more.

* Samples run in duplicate.
** Calculated as 2.2 hours required per plate.
*** Assumes 50 μl of sample used per well.
Your Custom Assay Development Workflow Source

<table>
<thead>
<tr>
<th>Couple Beads</th>
<th>Count Beads</th>
<th>Run Assay</th>
<th>Wash</th>
<th>Read</th>
<th>Analyze</th>
</tr>
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<tbody>
<tr>
<td>Bio-Plex Pro Magnetic COOH Beads</td>
<td>TC20 Automated Cell Counter</td>
<td>Bio-Plex Pro Assay Reagent Kit</td>
<td>Automated Bio-Plex Pro Wash Station</td>
<td>Manual Bio-Plex Handheld Magnetic Washer</td>
<td>Bio-Plex Systems</td>
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**Custom Assays**
Do you need to develop your own unique assays? We provide all the tools you need to develop and run your assays, including magnetic COOH beads, antibodies, equipment, and an optimized reagent kit. [Learn more.]

**Increase Precision**
Do you have issues with precision? Magnetic washing and automation improve assay reproducibility. [Learn more.]

**Confidence in Your Results**

**Actionable Data**
How do you make sense of your data? Quickly compare samples and identify relevant differences for targets with Bio-Plex Data Pro Software. [Learn more.]

Our professional, knowledgeable, and experienced technical support and service engineers are committed to quality and service. From research to controlled environments, your Bio-Rad specialists will help care for your investment and keep your projects in motion. [Learn more.]


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