# Multiplex Assays for TGF-β Superfamily Signaling

# Proteome Profiler<sup>™</sup> Antibody Arrays

Rapid - analyze the expression level of dozens of proteins simultaneously

Economical - contains 4 membranes—each antibody is spotted in duplicate

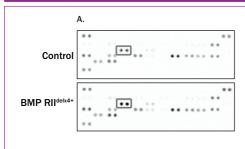
Versatile - over 25 arrays for both intra- and extracellular factors

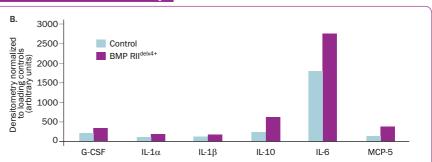
## Luminex® Performance Assays

Flexible - up to 100 biomarkers can be simultaneously profiled **Economical** - assays require a small sample volume (<50  $\mu$ L)

Time-saving - all assays can be performed in 3-3.5 hrs

### Proteome Profiler: Increase Your Potential for Discovery





Proteome Profiler Mouse Cytokine Array Detects Aberrant Cytokine Production in Macrophages from BMP RII<sup>detv4+</sup> Transgenic Mice. Macrophages isolated from control and BMP RII<sup>detv4+</sup> mice were activated in culture using lipopolysaccharide. Supernatants were collected after 24 h and assayed using the Proteome Profiler Mouse Cytokine Antibody Array (Catalog # ARY006). (A) Representative arrays of activated Control and BMP RII<sup>detv4+</sup> macrophage supernatants. The set representing Interleukin (IL)-6 is boxed in gray. (B) Densitometry histograms of selected analytes from activated Control (blue) and BMP RII<sup>detv4+</sup> (purple) macrophage supernatants. IL-1α, IL-1β, IL-6, IL-10, G-CSF, and MCP-5 are increased in BMP RII<sup>detv4+</sup> mice compared to control. All changes are significant at p<0.01 by ANOVA. *Adapted from Talati M.*, et al. (2014) PLoS ONE 9: e94119.

#### Investigate the functional effects of TGF- $\!\beta$ signaling pathways

|                         | Catalog # |        |        |
|-------------------------|-----------|--------|--------|
| Kit                     | Human     | Mouse  | Rat    |
| Cytokine Array, Panel A | ARY005    | ARY006 | ARY008 |
| XL Cytokine Array       | ARY022    | ARY028 | -      |
| Angiogenesis Array      | ARY007    | ARYO15 | -      |

#### Investigate non-canonical TGF-β signaling

| Array   | Catalog # |
|---|-----------|
| Human Phospho-Mitogen-activated Protein Kinase (MAPK)<br>Antibody Array | ARY002B   |
| Human Phospho-Kinase Array  | ARY003B   |



### Luminex Performance Assays

R&D Systems Luminex Performance Assays are designed to maximize assay accuracy and precision while preserving the benefits of multiplexing. Choose analytes from established panels and select "premixed" or "end-user mixed" options.

#### TGF-β Superfamily-Related Luminex Performance Assay Panels

| Human High Sensitivity Cytokine Panel A |
|---|
| Human High Sensitivity Cytokine Panel B |
| Human Angiogenesis Panel                |
| Human TGF-β Panel                       |

