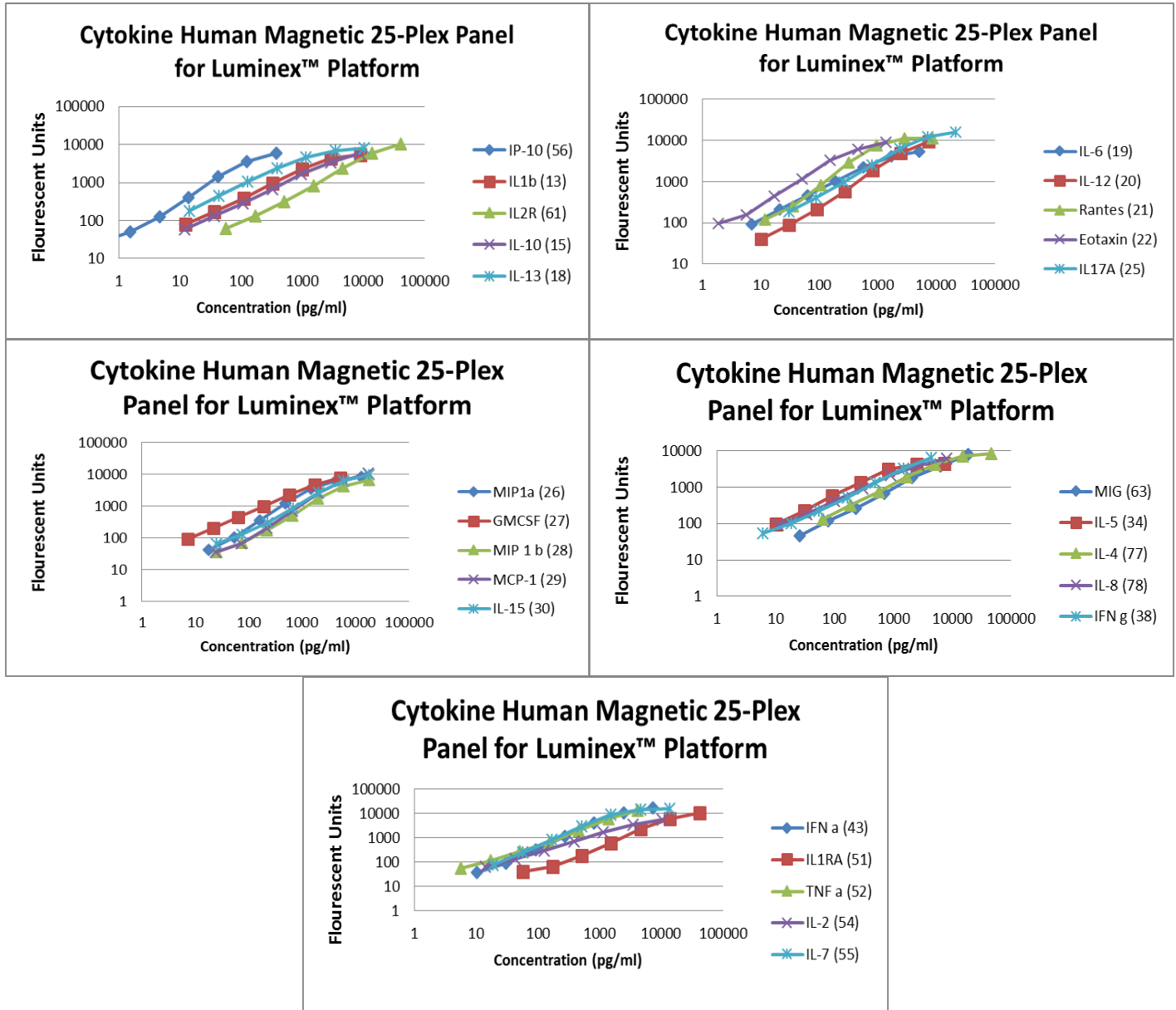


## Human Cytokine Magnetic 25-Plex Panel Technical Data Sheet

### Performance Characteristics

Typical Standard Curves (Note: Data presented here were collected as a 25-plex, but are depicted in 5-plex groupings for clarity.)



| Analyte     | Magnetic Bead Region | Sensitivity (pg / mL) | Recovery |             |                |                |     | NIBSC calibration   | NIBSC Preparation Number | Intra assay CV* |
|-------------|----------------------|-----------------------|----------|-------------|----------------|----------------|-----|---------------------|--------------------------|-----------------|
|             |                      |                       | Serum    | EDTA Plasma | Citrate Plasma | Heparin Plasma | TC* |                     |                          |                 |
| Eotaxin     | 22                   | <0.5                  | √        | √           | √              | NR             | √   | N/A                 | N/A                      | 9.0 %           |
| GM-CSF      | 27                   | <0.5                  | √        | √           | √              | √              | √   | 1 ng = 6 IU         | 88/646                   | 9.1 %           |
| IFN alpha   | 43                   | <5                    | √        | -           | √              | √              | √   | 1 ng = 14 IU        | 94/784                   | 7.9 %           |
| IFN gamma   | 38                   | <0.5                  | √        | √           | √              | -              | √   | 1 ng = 0.7 IU       | 82/587                   | 9.0 %           |
| IL-10       | 15                   | <0.5                  | √        | √           | √              | √              | √   | 1 ng = 13 IU        | 93/722                   | 9.8 %           |
| IL-12       | 20                   | <1                    | √        | √           | √              | -              | √   | 1 ng = 11 IU        | 95/544                   | 8.1 %           |
| IL-13       | 18                   | <1                    | √        | √           | √              | √              | √   | 1 ng = 1.2 IU       | 94/622                   | 9.6 %           |
| IL-15       | 30                   | <5                    | √        | √           | √              | √              | √   | 1 ng = 150 IU       | 95/554                   | 7.6 %           |
| IL-17A      | 25                   | <1                    | √        | √           | √              | √              | √   | 1 ng = 10 IU        | 01/420                   | 6.0 %           |
| IL-1 beta   | 13                   | <5                    | √        | √           | √              | √              | √   | 1 ng = 25 IU        | 86/680                   | 8.8 %           |
| IL-1RA      | 51                   | <10                   | √        | √           | √              | √              | √   | 1 ng = 0.001 ImU    | 92/644                   | 5.1 %           |
| IL-2        | 54                   | <0.5                  | √        | √           | √              | √              | √   | 1 ng = 7 IU         | 86/564                   | 9.6 %           |
| IL-2R       | 61                   | <10                   | √        | √           | √              | √              | √   | 1 ng = 12.2-40.6 IU | 97/600                   | 4.2 %           |
| IL-4        | 77                   | <5                    | √        | √           | √              | √              | √   | 1 ng = 65 IU        | 88/656                   | 8.7 %           |
| IL-5        | 34                   | <0.5                  | √        | √           | √              | √              | √   | 1 ng = 0.2 IU       | 90/586                   | 7.5 %           |
| IL-6        | 19                   | <0.5                  | √        | √           | √              | √              | √   | 1 ng = 30 IU        | 89/548                   | 7.0 %           |
| IL-7        | 55                   | <5                    | √        | √           | √              | NR             | √   | 1 ng = 64 IU        | 90/530                   | 9.8 %           |
| IL-8        | 78                   | <1                    | √        | √           | √              | √              | √   | 1 ng = 40 IU        | 89/520                   | 9.8 %           |
| IP-10       | 56                   | <0.5                  | √        | √           | √              | √              | √   | N/A                 | N/A                      | 3.7 %           |
| MCP-1       | 29                   | <5                    | √        | √           | √              | √              | √   | 1 ng = 1.5 IU       | 92/794                   | 5.8 %           |
| MIG         | 63                   | <5                    | √        | √           | √              | NR             | √   | N/A                 | N/A                      | 9.4 %           |
| MIP-1 beta  | 28                   | <5                    | √        | √           | √              | √              | √   | N/A                 | N/A                      | 3.6 %           |
| MIP-1 alpha | 26                   | <5                    | √        | √           | √              | √              | √   | 1 ng = 0.4 IU       | 92/518                   | 9.5 %           |
| Rantes**    | 21                   | <5                    | √        | √           | √              | √              | √   | 1 ng = 0.7 IU       | 92/520                   | 8.9 %           |
| TNF alpha   | 52                   | <0.5                  | √        | √           | √              | √              | √   | 1 ng = 0.2 IU       | 88/786                   | 8.3 %           |

\*Analysis performed during product development and with first lots produced.

\*\*Additional sample dilution required for accurate recovery.

Notes: 70-130% recovery (√), 50-69% recovery (-), 131-150% recovery (+), <50% or >150% recovery (NR - not recommended)

### Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at [www.thermofisher.com/us/en/home/global/terms-and-conditions.html](http://www.thermofisher.com/us/en/home/global/terms-and-conditions.html). If you have any questions, please contact Life Technologies at [www.thermofisher.com/support](http://www.thermofisher.com/support).

#### Product label explanation of symbols and warnings

|  |                |  |            |  |                        |  |        |  |              |  |                              |  |   |
|--|----------------|--|------------|--|------------------------|--|--------|--|--------------|--|------------------------------|--|---|
|  | Catalog Number |  | Batch code |  | Temperature limitation |  | Use by |  | Manufacturer |  | Consult instructions for use |  | Caution, consult accompanying documents |
|--|----------------|--|------------|--|------------------------|--|--------|--|--------------|--|------------------------------|--|---|

Manufacturer's address: Bender MedSystems GmbH | Campus Vienna Biocenter 2 | 1030 Vienna, Austria

The information in this guide is subject to change without notice.

DISCLAIMER: TO THE EXTENT ALLOWED BY LAW, LIFE TECHNOLOGIES AND/OR ITS AFFILIATE(S) WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

**Important Licensing Information:** These products may be covered by one or more Limited Use Label Licenses. By use of these products, you accept the terms and conditions of all applicable Limited Use Label Licenses.

©2018 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.