# Features

- Quantitation range of 0.274-200 pg/mL
- Designed for multiplex analysis, providing more data using a single sample
- Open and configurable to maximize flexibility
- Analyzes up to 10 soluble proteins with just 25 to 50  $\mu L$  of sample
- Works with flow cytometers equipped with 488-nm and 633-nm lasers



Time course of human PBMCs stimulated with PMA and Calcium lonophore. Additional data on the reverse side.

The BD<sup>™</sup> Cytometric Bead Array (CBA) Enhanced Sensitivity Flex Set system, based on the established BD CBA Flex Set system and proprietary detection technology, provides a new level of detection compared to other multiplex assay systems. Most bead assays can detect down to 5–10 pg/mL. The Enhanced Sensitivity Flex Set assays can detect as low as 0.274 pg/mL—more than a 35-fold improvement. This breakthrough allows researchers to get quantitative results in samples (eg, cultures at early time points) that were previously below the level of detection. The system includes assays for multiple human and mouse cytokines involved in inflammation and leukocyte differentiation, which can be combined to create a multiplexed panel. The system provides a reliable, flexible method for quantitative detection of multiple proteins in a single serum, plasma, or tissue culture supernatant sample.

### More data in less time from a single sample

Multiplexing is especially useful because it maximizes the number of proteins that can be analyzed in a small amount of sample. Analyze up to 11 proteins with just 25 to 50  $\mu$ L of sample using the Enhanced Sensitivity Flex Set system. Other methods such as ELISA require a similar amount of sample, but can analyze only one protein from the same volume. Because such a small amount of sample is needed, multiplexing reduces hands-on time as well as time to results.

#### Flexible and ready to use

Based on the established BD CBA Flex Set system and its proprietary detection technology, Enhanced Sensitivity Flex Set assays are formulated for combination into any size plex. They are sold individually to provide a highly flexible system. Dedicated master buffer kits for human and mouse contain all the buffers needed for the assay as well as an optimized protocol for performing the assay.

#### Robust assay system

All assays have been characterized for performance in single-plex and multiplex scenarios to ensure consistent data. The antibody pair in each assay is evaluated for dynamic range, sensitivity, and parallel titration to native biological samples. Results from samples containing levels of analyte detectable using the standard BD CBA Flex Set assay correlated with the Enhanced Sensitivity Flex Set assay. The optimized assay protocol ensures low background and superior signal-to-noise while using a novel detection protocol.

Visit bdbiosciences.com/cba for more information.



# **BD CBA Enhanced Sensitivity Flex Set System**







**Human TNF** 10000.0 Conc. (pg/mL) 1000.0 100.0 10.0 1.0 0.5 2.5 0.25 0.75 Ь و <u>ا.</u>  $\sim$ m 4 24 Time (h) ES Flex set

# **Ordering Information**

Description	Cat. No.
Human IFN-y Enhanced Sensitivity Flex Set (Bead B8)	561515
Human IL-1 $\beta$ Enhanced Sensitivity Flex Set (Bead B4)	561509
Human IL-2 Enhanced Sensitivity Flex Set (Bead A4)	561517
Human IL-4 Enhanced Sensitivity Flex Set (Bead A5)	561510
Human IL-5 Enhanced Sensitivity Flex Set (Bead A6)	561511
Human IL-6 Enhanced Sensitivity Flex Set (Bead A7)	561512
Human IL-8 Enhanced Sensitivity Flex Set (Bead A9)	561513
Human IL-10 Enhanced Sensitivity Flex Set (Bead B7)	561514
Human IL-12p70 Enhanced Sensitivity Flex Set (Bead C6)	561518
Human IL-17A Enhanced Sensitivity Flex Set (Bead B5)	562143
Human TNF Enhanced Sensitivity Flex Set (Bead C4)	561516
Human Enhanced Sensitivity Master Buffer Kit (100 Tests)	561521
Human Enhanced Sensitivity Master Buffer Kit (500 Tests)	561523

Description	Cat. No.
Mouse IFN-7 Enhanced Sensitivity Flex Set (Bead A4)	562233
Mouse IL-1 $\beta$ Enhanced Sensitivity Flex Set (Bead B9)	562278
Mouse IL-2 Enhanced Sensitivity Flex Set (Bead A5)	562262
Mouse IL-4 Enhanced Sensitivity Flex Set (Bead A7)	562272
Mouse IL-5 Enhanced Sensitivity Flex Set (Bead A6)	562234
Mouse IL-6 Enhanced Sensitivity Flex Set (Bead B4)	562236
Mouse IL-10 Enhanced Sensitivity Flex Set (Bead C4)	562263
Mouse IL-12p70 Enhanced Sensitivity Flex Set (Bead D7)	562264
Mouse IL-13 Enhanced Sensitivity Flex Set (Bead B8)	562273
Mouse IL-17A Enhanced Sensitivity Flex Set (Bead C5)	562261
Mouse TNF Enhanced Sensitivity Flex Set (Bead C8)	562336
Mouse Enhanced Sensitivity Master Buffer Kit (100 Tests)	562246
Mouse Enhanced Sensitivity Master Buffer Kit (500 Tests)	562248



# **BD Biosciences**

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