Technical Data Sheet

Human Inflammatory Cytokine Lyophilized Standard

Product Information

Material Number: 552932
Size: 1 Vial(s)
Storage Buffer: Lyophilized in an aqueous buffered solution containing BSA and ProClin™ 150.

Description

The Human Inflammatory Cytokine Standard contains a mixture of individually lyophilized recombinant proteins made up of recombinant human Interleukin (IL)-8, IL-1β, IL-6, IL-10, Tumor Necrosis Factor (TNF), and IL-12p70. The reconstituted Human Inflammatory Cytokine Standard is designed for use as a standard control with the BD™ Cytometric Bead Array (CBA) Human Inflammatory Cytokine Kit (Cat. No. 551811). Please refer to the manual included with the Human Inflammatory Cytokine CBA Kit for further information.

Preparation and Storage

Store the lyophilized standard at 4°C prior to reconstitution.

Lysospheres from 1 vial of the Human Inflammatory Cytokine Cytometric Bead Array Standard, when reconstituted in 2.0 mL Assay Diluent, approximates the CBA activity of human Interleukin (IL)-8, IL-1β, IL-6, IL-10, Tumor Necrosis Factor (TNF), and IL-12p70 at a concentration of 5000 pg/mL. Following reconstitution, maintain the Human Inflammatory Cytokine Standard at 4°C and use within 12 hours. Any unused reconstituted standard must be discarded after this period (do not store or reuse).

Application Notes

Application

Flow cytometry Routinely Tested

Recommended Assay Procedure:

The Human Inflammatory Cytokine Standard has been tested with the BD™ CBA Human Inflammatory Cytokine Kit (Cat. No. 551811) to assure protein amounts and function in the BD™ CBA assay. Investigators are encouraged to refer to the CBA kit manual or to the abbreviated instruction below (Preparation of Human Inflammatory Cytokine Standard Protocol). The Human Inflammatory Cytokine Standard should be reconstituted using Assay Diluent supplied with the aforementioned CBA kits (component no. 51-2432KC) or it may be purchased separately (Cat. No. 560104).

Preparation of Human Inflammatory Cytokine Standard:

1. Open one vial of the lyophilized Human Inflammatory Cytokine Standard. Transfer all the lysospheres to a polypropylene tube (BD Falcon™, Cat. No. 352097). Label the tube "Top Standard".
2. Reconstitute the standard with 2.0 mL of Assay Diluent. Allow the reconstituted standard to equilibrate for at least 15 minutes before making dilutions. Mix the reconstituted protein by pipette only. Do not vortex or mix vigorously.
3. Label additional 12 x 75 mm tubes (BD Falcon™, Cat. No. 352008) and arrange them in the following order: Top Standard, 1:2, 1:4, 1:8, 1:16, 1:32, 1:64, 1:128, and 1:256.
4. Add 300 µl of Assay Diluent to each of the dilution tubes.
5. Perform a serial dilution by transferring 300 µl from the Top Standard to the 1:2 dilution tube and mix thoroughly. Do not vortex, mix by pipette only. Continue making serial dilutions by transferring 300 µl from the 1:2 tube to the 1:4 tube and so on to the 1:256 tube and mix thoroughly. Prepare one tube containing only Assay Diluent to serve as the 0 pg/mL negative control.

Suggested Companion Products

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<th>Catalog Number</th>
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<tr>
<td>551811</td>
<td>Human Inflammatory Cytokine Cytometric Bead Array (CBA) - I Kit</td>
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<td>BD Falcon™ Round Bottom Tubes, 6 ML</td>
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Product Notices

1. ProClin is a trademark of Rohm and Haas Company.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Warning: CBA lyophilized standard contains 0.02% (w/w) of a CMIT/MIT mixture (3:1), which is a mixture of:
5-chloro-2-methyl-4-isothiazolin-3-one [EC No 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC No 220-239-6] (3:1).

Hazard statement: May cause an allergic skin reaction.

Precautionary statements: Wear protective gloves/eye protection. Wear protective clothing. Avoid breathing mist/vapours/spray. If skin irritation or rash occurs: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. Dispose of contents/container in accordance with local/regional/national/international regulations.