

Technical Data Sheet

Human IL-1 β Standard

Product Information

Material Number:	558457
Component:	51-9003493
Description:	Human IL-1 β Standard
Size:	1 Vial (1 ea)
Storage Buffer:	Lyophilized in an aqueous buffered solution containing BSA and ProClin™ 150.

Description

This product contains lyophilized recombinant human Interleukin-1 β (IL-1 β). When reconstituted, this product can be used as a standard control with the BD™ CBA Human IL-1 β Flex Set (Cat. No. 558279) or with the BD™ CBA Human IL-1 β Enhanced Sensitivity Flex Set (Cat. No. 561509). Please refer to the technical data sheet included with the BD™ CBA Human IL-1 β Flex Set or the BD™ CBA Human IL-1 β Enhanced Sensitivity Flex Set for further information.

Preparation and Storage

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

Lyosphere(s) from 1 vial of Human IL-1 β Standard, when reconstituted in 4.0 mL Assay Diluent, approximates the CBA activity of Human IL-1 β at a concentration of 2500 pg/mL. Following reconstitution, maintain the Human IL-1 β 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 IL-1 β Standard has been tested to assure to function as a standard when used with the BD™ Cytometric Bead Array (CBA). Investigators are encouraged to refer to the technical data sheet for the BD™ CBA Human IL-1 β Flex Set (Cat. No. 558457) or the BD™ CBA Human IL-1 β Enhanced Sensitivity Flex Set (Cat. No. 561509). The Human IL-1 β Standard is lyophilized and should be reconstituted and serially diluted before mixing with CBA capture beads and PE detection reagents. An abbreviated instruction has been provided below (Preparation of Human IL-1 β Standard Protocol). The Human IL-1 β Standard should be reconstituted using Assay Diluent, which is provided with the BD™ CBA Human Soluble Protein Master Buffer Kit (Cat. No. 558264 or 558265), the BD™ CBA Human Enhanced Sensitivity Master Buffer Kit (Cat. No. 561521 or 561523) or it may also be purchased separately (Cat. No. 560104).

Preparation of Human IL-1 β Standard for use with the BD™ CBA Human IL-1 β Flex Set (Cat. No. 558457):

1. Open one vial of the lyophilized Human IL-1 β Standard. Transfer the lyosphere(s) to a polypropylene tube (BD Falcon™, Cat. No. 352097). Label the tube "Top Standard".
2. Reconstitute the standard with 4.0 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 500 μ L of Assay Diluent to each of the dilution tubes.
5. Perform a serial dilution by transferring 500 μ L from the Top Standard to the 1:2 dilution tube and mix thoroughly. Do not vortex, mix by pipet only. Continue making serial dilutions by transferring 500 μ L 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.

Preparation of Human IL-1 β Standard for use with the BD™ CBA Human IL-1 β Enhanced Sensitivity Flex Set (Cat. No. 561509):

1. Open one vial of the lyophilized Human IL-1 β Standard. Transfer the lyosphere(s) to a polypropylene tube (BD Falcon™, Cat. No. 352097).
2. Reconstitute the standard with 4.0 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, 1:3, 1:9, 1:27, 1:81, 1:243, and 1:729.
4. Add 460 μ L of Assay Diluent into the Top Standard tube.
5. Add 400 μ L of Assay Diluent to each of the remaining dilution tubes.
6. Transfer 40 μ L of the reconstituted standard into the Top Standard tube. Mix by pipette or gently vortexing for no longer than 3 seconds.

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	866.979.9408	32.2.400.98.95	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2015 BD

558457 Rev. 9



7. Perform a serial dilution by transferring 200 µl from the Top Standard to the 1:3 dilution tube and mix thoroughly. **Do not vortex, mix by pipet only.** Continue making serial dilutions by transferring 200 µl from the 1:3 tube to the 1:9 tube and so on to the 1:729 tube and mix thoroughly. Prepare one tube containing only Assay Diluent to serve as the 0 fg/mL negative control.

Suggested Companion Products

Catalog Number	Name	Size	Clone
558279	Human IL-1β Flex Set	1 Vial(s)	(none)
558264	Human Soluble Protein Master Buffer Kit	100 Tests	(none)
558265	Human Soluble Protein Master Buffer Kit	500 Tests	(none)
560104	Assay Diluent	30 mL	(none)
352097	BD Falcon™ Conical Centrifuge Tubes, 15 ML		(none)
352008	BD Falcon™ Round Bottom Tubes, 6 ML		(none)
561509	Human IL-1β Enhanced Sensitivity Flex Set	100 Tests	(none)
561521	Human Enhanced Sensitivity Master Buffer Kit	100 Tests	(none)
561523	Human Enhanced Sensitivity Master Buffer Kit	500 Tests	(none)

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.
3. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
4. 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.

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	866.979.9408	32.2.400.98.95	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2015 BD

558457 Rev. 9

