

## Technical Data Sheet

# **Human IL-17F Flex Set**

#### **Product Information**

Material Number:562151Size:100 TestsBead Position:C6

 Assay Range:
 10-2,500 pg/mL

 Reactivity:
 QC Testing: Human

Component Description: Human IL-17F Standard

Component Mat. No: 51-9007438

Component Storage Buffer: Lyophilized in an aqueous buffered solution containing BSA

and ProClin™ 150.

Component Description: Human IL-17F PE Detection Reagent

Component Mat. No: 51-9007464

Component Storage Buffer: Aqueous buffered solution containing BSA and ≤0.09%

sodium azide.

Component Description: Human IL-17F Capture Bead C6

Component Mat. No: 51-9007468

Component Storage Buffer: Aqueous buffered solution containing fetal bovine serum

and ≤0.09% sodium azide.

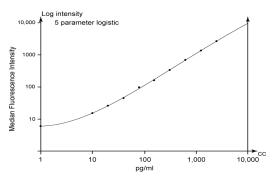


Figure 1. Example BD CBA Human IL-17F Flex Set standard curve. Data acquired on a BD FACSArray bioanalyzer and analyzed using FCAP Array Software.

## Description

The BD<sup>TM</sup> CBA Human IL-17F Flex Set is a bead-based immunoassay capable of measuring human Interleukin-17F (IL-17F) in serum, plasma, and cell culture supernatant samples. Human reactivity was determined by testing samples with the BD CBA Human IL-17F Flex Set. The biology and function of IL-17 has been extensively reviewed in the literature. For more information on bead-based immunoassays, refer to the product insert for the BD CBA Human Soluble Protein Master Buffer Kit (Cat. No. 558264 or 558265).

#### **Preparation and Storage**

This BDTM CBA Flex Set contains one vial each of Capture Bead and PE Detection Reagent and two vials of Standard. The Capture Bead and PE Detection Reagent components of this flex set have been formulated to a 50x concentration to ensure product performance when multiplexed. The Standard component is lyophilized and should be transferred to a 15 mL polypropylene tube for reconstitution. When reconstituted in 4.0 mL Assay Diluent, the standard has a protein concentration of 2,500 pg/mL. Discard unused reconstituted standard, do not store or reuse. Store lyophilized standard and other components at 4°C. Protect Capture Beads and the PE Detection Reagent from prolonged exposure to light.

## **Application Notes**

Recommended Assay Procedure: The BD CBA Human IL-17F Flex Set must be used in conjunction with a BD CBA Human Soluble Protein Master Buffer Kit (Cat. No. 558264, 100 tests, or 558265, 500 tests), a flow cytometer, and FCAP Array<sup>TM</sup> Software. Detailed instructions on the use of this product can be found in the manual for the BD CBA Human Soluble Protein Master Buffer Kit. When following the directions in the Master Buffer Kit, the top standard point for the BD CBA Human IL-17F Flex Set will be 2500 pg/mL. An example standard curve is shown in Figure 1.

#### **BD Biosciences**

bdbiosciences.com

 United States
 Canada
 Europe
 Japan
 Asia Pacific
 Latin America/Caribbear

 877.232.8995
 800.268.5430
 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 stictly prohibited.

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

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. © 2014 BD



The Hu IL-17F Flex Set should not be used with any non-BD CBA Human Soluble Protein Flex Set Reagents, which include: Human Enhanced Sensitivity, Human Soluble Receptor, Mouse/Rat Soluble Protein and Cell Signalling Flex Sets. For an updated assay compatibility chart for the BD CBA Human Soluble Protein Flex Sets, please visit http://www.bdbiosciences.com/cbasetup.

#### Performance

**Limit of Detection:** The theoretical limit of detection is 2.9 pg/mL and was determined by evaluating the estimated result of the average MFI of the negative control (0 pg/mL, n=30) + 2 standard deviations.

		Inter-Assay Reproducibility			Intra-Assay Reproducibility			
Specificity		Mean (pg/ml)	Standard Deviation	%CV	Mean Standard (pg/ml) Deviation		%CV	
Human IL-17F	Sample 1	35.9	2.9	8%	27.6	1.1	4%	
	Sample 2	141.0	9.5	7%	114.0	9.9	9%	
	Sample 3	602.5	27.1	5%	491.3	45.3	9%	

Reproducibility: The intra-assay and inter-assay reproducibility were determined for the BD CBA Human IL-17F Flex Set by evaluating ten replicates of three different sample levels (intra-assay) and three replicates of three different sample levels from four separate experiments (inter-assay).

Specificity	Cell Culture Supernatant		Seri	um	Plasma		
	Average % Recovery	Range	Average % Recovery	Range	Average % Recovery	Range	
Human IL-17F	99%	99 - 100%	90%	89 - 91%	72%	70 - 75%	

Recovery: Cell culture supernatant, serum, or EDTA-treated plasma were spiked with three different levels of protein. The spiked samples were assayed and the results were compared with expected values. Serum and plasma samples were diluted 1:4 before the protein was spiked into each. Serum is a pool of 800 - 1000 donors and the plasma was pooled from at least 20 donors.

C   .	Cell Culture Supernatant		Ser	um	Plasma		
Sample Dilution	Detected (pg/ml)	% of Expected	Detected (pg/ml)	% of Expected	Detected (pg/ml)	% of Expected	
Spiked sample	564.5	100%	442.5	100%	382.8	100%	
1:2	264.2	94%	212.3	96%	181.0	95%	
1:4	130.8	93%	102.4	93%	93.4	98%	

Linearity: Cell culture supernatant, 1:4 diluted serum, or 1:4 diluted EDTA-treated plasma were spiked with protein and serially diluted. The diluted samples were assayed and the results were compared with the original spiked sample.

#### **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. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 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
 800.268.5430
 32.2.400.98.95
 0120.8555.90
 65.6861.0633
 55.11.5185.9995

For country contact information, visit  ${\bf bdbiosciences.com/contact}$ 

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 stictly 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. © 2014 BD



562151 Rev. 3 Page 2 of 2