

Cell-ID 20-Plex Pd Barcoding Kit

Catalog number: 201060
Package size: 3 sets of Cell-ID™ 20-Plex Pd Barcodes and required barcoding solutions

Storage:

- Buffers and PBS: 4 °C. Do not freeze.
- 20-plex Pd barcodes: Upon receipt store at –20 °C.

Contents: Each kit contains the following components:

- 3 sets of 20 palladium (Pd) barcodes in PCR tube strips. Each tube contains 10 µL of pre-mixed barcode containing 3 Pd isotopes (indicated at right).
- Maxpar® Cell Staining Buffer (500 mL)
- Maxpar Fix I Buffer (5X) (15 mL)
- Maxpar Barcode Perm Buffer (10X) (50 mL)
- Maxpar PBS (500 mL)

		Palladium Isotope					
		102	104	105	106	108	110
Sample Code	1	•	•	•			
	2	•	•		•		
	3	•	•			•	
	4	•	•				•
	5	•		•	•		
	6	•		•		•	
	7	•					•
	8	•			•	•	
	9	•			•		•
	10	•				•	•
	11		•	•	•		
	12		•			•	
	13		•	•			•
	14		•		•	•	
	15		•		•		•
	16		•			•	•
	17			•	•	•	
	18			•			•
	19			•		•	•
	20				•	•	•

Contents of each pre-mixed barcode tube

Technical Information

Description

The Cell-ID 20-Plex Pd Barcoding Kit enables unique barcoding of 20 samples so they can be combined and subsequently stained and acquired as one multiplexed sample, followed by software debarcoding and individual sample analysis (see example data on next page). Multiplexing samples improves data quality since the 20 samples are stained, processed, and acquired as one sample, eliminating sample-specific staining and data collection variation.

Recommended Use

- The Cell-ID 20-Plex Pd Barcoding Kit should be used according to the Cell-ID 20-Plex Pd Barcoding Kit User Guide (PRD023). For more information, see The Benefits of Palladium Barcoding on Data Quality and Workflow Application Note (FLDM-00012). Both documents can be downloaded from fluidigm.com.
- The Pd metal isotopes of 106 Da and 110 Da in this kit are not compatible for use with antibodies labeled with 106Cd and 110Cd due to direct mass overlap.
- Barcoding cell samples with this kit is compatible with downstream staining of surface, intracellular, nuclear, and phosphorylated antigen targets.

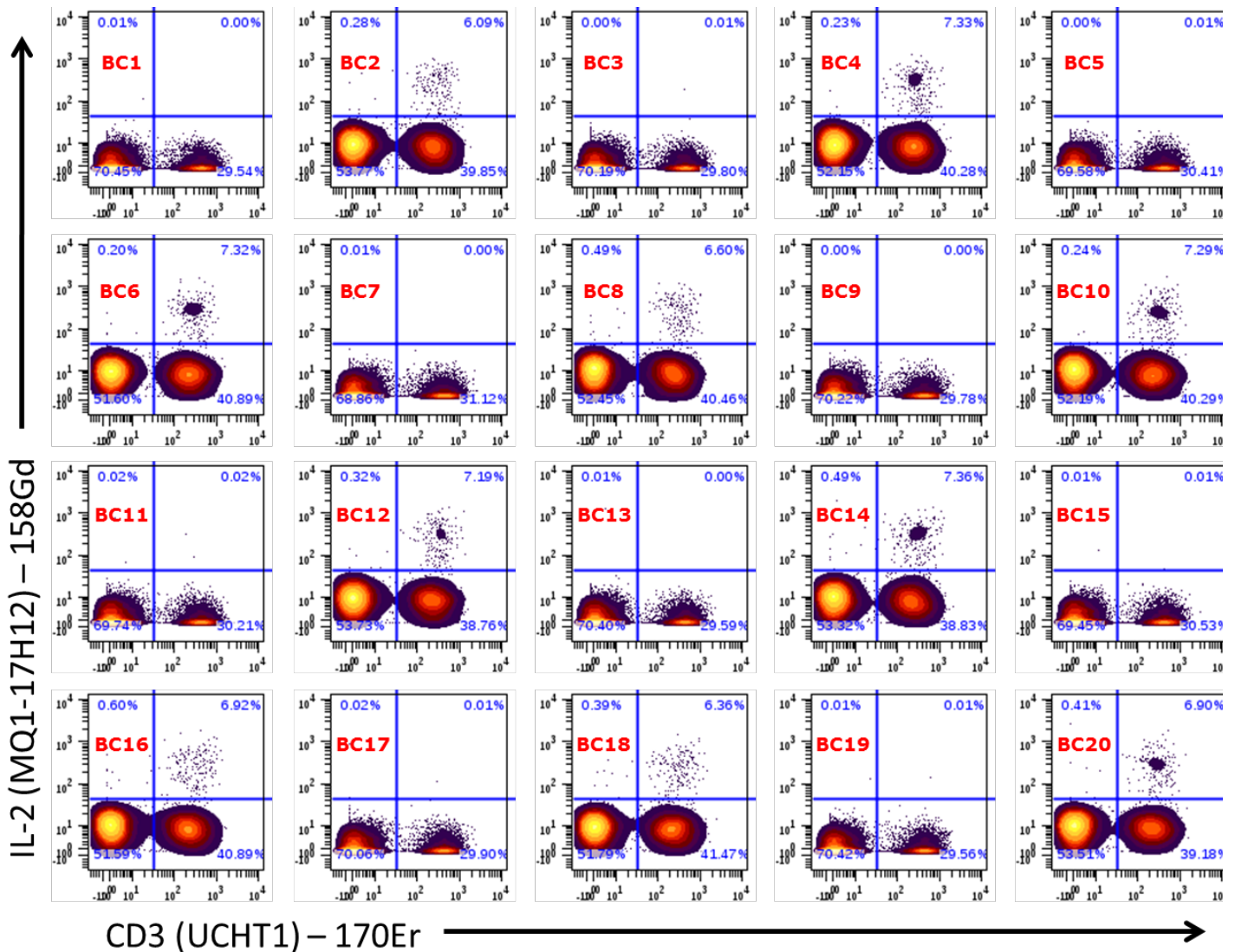
References

Behbehani G.K., et. al. "Transient partial permeabilization with saponin enables cellular barcoding prior to surface marker staining." *Cytometry Part A* 85 (2014): 1,011–9.

Zunder E.R., et. al. "Palladium-based mass tag cell barcoding with a doublet-filtering scheme and single-cell deconvolution algorithm." *Nature Protocols* 10 (2015): 316–33.

Safety

Use standard laboratory safety protocols. Read and understand the safety data sheets (SDSs) before handling chemicals. To obtain SDSs, go to fluidigm.com/sds and search for the SDS using either the product name or the part number.



Human PBMC were either unstimulated or treated for 5 hr with PMA, ionomycin, monensin, and brefeldin A. The two samples were divided into 10 tubes each. The unstimulated tubes were barcoded with odd palladium barcodes, and the treated tubes were barcoded with even palladium barcodes. Following barcoding, the samples were combined and stained as 1 sample with 170Er anti-CD3 (UCHT1) and 158Gd anti-IL-2 (MQ1-17H12). The sample was acquired on a suspension mass cytometer, and the resultant .fcs file was debarcoded with the CyTOF® debarcoding software. Total viable cells are displayed in the analysis, and the frequency of events in each quadrant is indicated.

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