

BD FACSymphony™ A1 Cell Analyzer

Premium performance in a benchtop footprint





BD FACSymphony™ A1 Cell Analyzer features:

- Premium high-end BD FACSymphony™ instrument technology scaled to fit on your benchtop
- Flexibility to meet a broad spectrum of research needs from small particle research to 16-color immunophenotyping
- Industry standard **BD FACSDiva[™] Software** for streamlined workflow from system setup to data acquisition and analysis



shared across the premium BD FACSymphony™ platforms. The BD FACSymphony™ A1 Analyzer is compatible with BD Horizon™ Dyes and supports up to 16 colors or 19

parameters simultaneously.



Premium BD FACSymphony™ instrument technology

delivered in a compact size

Up to

16 fluorochromes and 19 parameters

to conduct deep and broad phenotyping





Enhance detection sensitivity

with four high-powered 100 mW lasers: Violet (405 nm), Blue (488 nm), Yellow-Green (561 nm) and Red (637 nm)

BD® Small Particle Detector Option for

analysis of small particles * *

such as extracellular vesicles including exosomes





with our redesigned optics including small beam spots combined with low-noise electronics



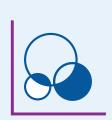
Gain rich scientific insights

by leveraging BD Horizon Brilliant™ Reagents

Enable easy system QC



using industry-standard
BD FACSDiva™ Software and BD® CS&T Beads



Utilizes FlowJo™ Software, the

leading bioinformatics platform*

for flow cytometry analysis



Ideal for labs with limited space

Small footprint (58 x 61 x 59 cm)

Automated sample ______
processing in ______
high-throughput mode

using the BD[®] High-Throughput Sampler Option

Able to detect up to 16 colors and resolve rare cell subsets

Table 1. Instrument configuration and reagents in the cytotoxic immune cells panel

Laser	Filter	Fluorochrome	Specificity	
Violet 405 nm	450/50	BV421	Perforin	
	525/50	BV480	CD159a (NKG2A)	
	610/20	BV605 -	CD19	
			CD14	
			CD123	
			CD141	
		FVS575V	-	
	670/30	BV650	CD3	
	710/50	BV711	CD314 (NKG2D)	
	780/60	BV786	HLA-DR	
Blue 488 nm	530/30	FITC	CD57	
	710/50	PerCP-Cy5.5	CD8	
Yellow-Green 561 nm	586/15	PE	CD158 (KIRs)	
	610/20	PE-CF594	CD56	
	670/30	PE-Cy5	CD95 (Fas)	
	710/50	PE-Cy5.5	CD127 (IL7R-α)	
	780/60	PE-Cy7	CD38	
Red 637 nm	670/30	AF647	Granzyme K	
	710/50	R718	Granzyme B	
	780/60	APC-H7	CD16 (FcgRIII)	

BV, BD Horizon Brilliant Violet™; FVS, BD Horizon™ Fixable Viability Stain; AF, Alexa Fluor™

Figure 1

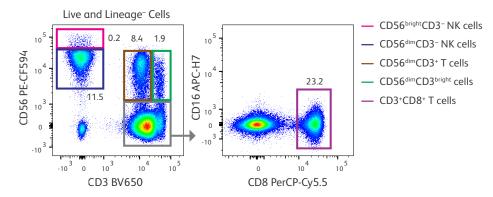


Figure 1. Identification of cytotoxic immune cell populations in healthy human peripheral blood Within live and lineage negative cells, analysis of CD56 versus CD3 revealed various cell populations that were color coded as cytokine-producing NK cells (pink), cytotoxic NK cells (blue), CD56 $^{\circ}$ T cells containing NKT cells (brown), CD56 $^{\circ}$ T cells containing $\gamma\delta$ T cells (green) and cytotoxic CD8 $^{\circ}$ T cells (purple).



To learn more, download the panel sheet Characterization of Cytotoxic Immune Cells in Human Peripheral Whole Blood from bdbiosciences.com

Figure 2A

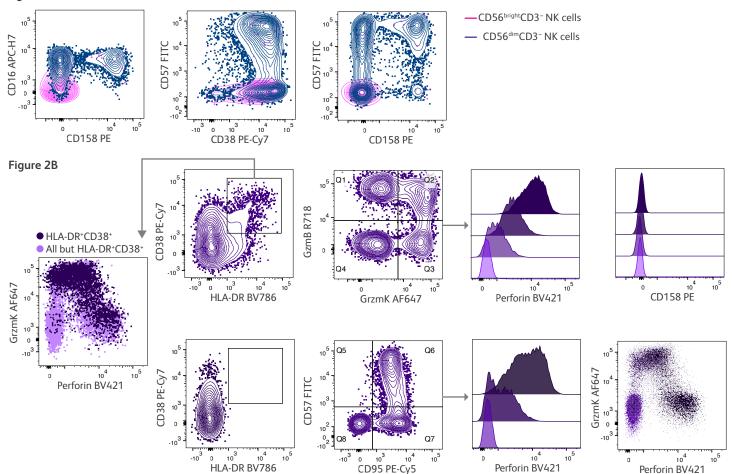
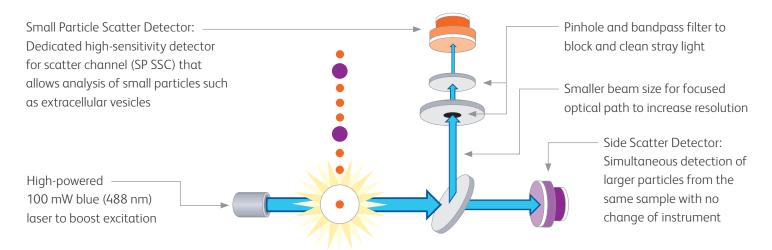


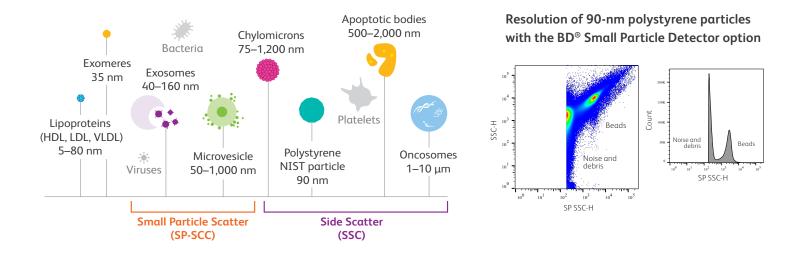
Figure 2. Phenotyping of circulating cytotoxic cells using a 16-color panel

The plots represent the analysis of cytolytic proteins in combination with various cell differentiation markers, enabling a deeper characterization of the cell populations gated in Figure 1. A. Overlay of NK cell subsets. B. Identification of activated CD8 T cells based on the expression of CD38 and HLA-DR. The HLA-DR FMO staining helped to determine the gating boundaries for proper detection of the double positive cells.

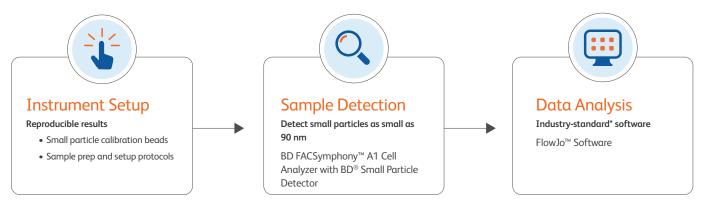
Simultaneous detection of large (SSC) and small (SP SSC) particles

The BD FACSymphonyTM A1 Cell Analyzer with optional BDTM Small Particle Detector is able to resolve scatter of small particles such as extracellular vesicles, viral particle, exosomes and more.





Seamless small particle detection workflow



 $^{^*}$ In 2020, Flow Jo^m Software was cited in leading immunology peer-reviewed journals more often than any other flow cytometry analysis software.

BD FACSymphony[™] Systems





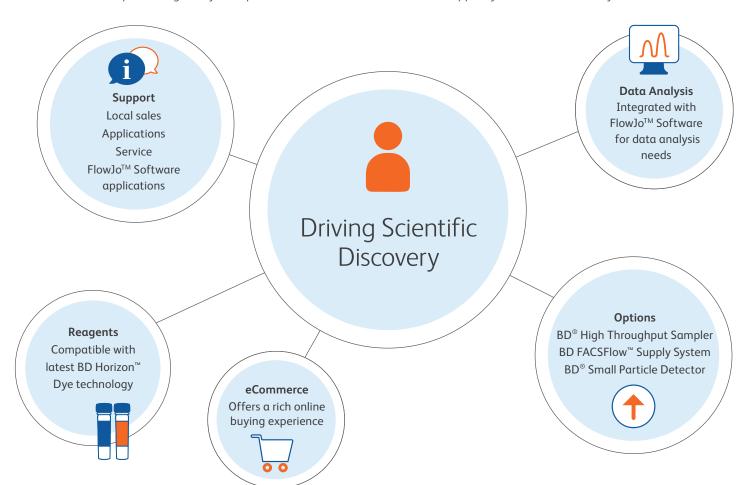




	BD FACSymphony™ A1	BD FACSymphony™ A3	BD FACSymphony™ A5	BD FACSymphony [™] S6
Number of lasers	4	5	5–9	5–9
Fluorescent detectors	16	Up to 28	Up to 48	Up to 58
Instrument type	Analyzer	Analyzer	Analyzer	Sorter
Software	BD FACSDiva™	BD FACSDiva™	BD FACSDiva™	BD FACSDivα™
Footprint	58 x 61 cm	83.8 x 76.2 cm	101.6 x 78.7 cm	101.6 x 78.7 cm
Small particle detector	Yes	No	No	No

Backed and Supported by BD

We're committed to partnering with you to provide the mission-critical tools and support you need to advance your research.



Class 1 Laser Product.

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

BD Life Sciences, San Jose, CA, 95131, USA

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