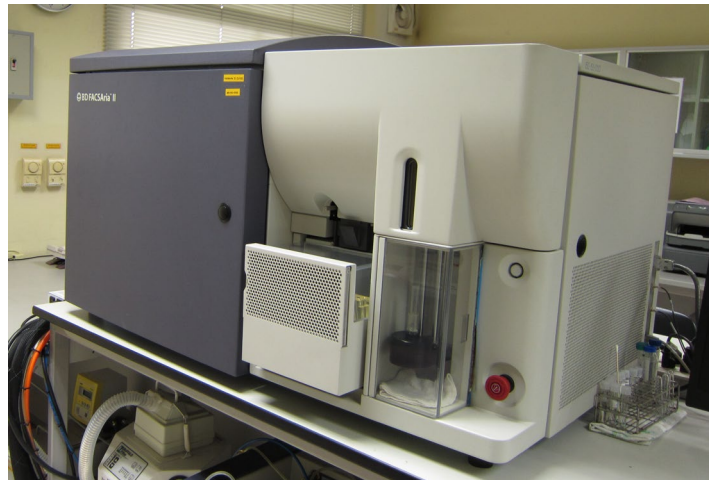


BD FACSAria-II cell sorter



Band: BD Bioscience (Becton and Dickinson and Company)

Model: BD FACSAria™ II Cell Sorter

Custodian: Sirapope Wongniam

Location: K635 Room, 6th Floor, Chaloeprakiet Building, Phyathai Campus

Description	Specifications
Fluorescence Sensitivity	FITC: 125 molecules of equivalent soluble fluorochrome (MESF-FITC) PE: 125 molecules of equivalent soluble fluorochrome (MESF-PE)
Fluorescence Resolution	Coefficient of variation PI-Area of <3.0%, full G0/G1 peak for propidium iodide (PI)-stained chicken erythrocyte nuclei Coefficient of variation Hoechst-Area of <3.5%, full G0/G1 peak for Hoechst-stained chicken erythrocyte nuclei

Description	Specifications
Fluorescence Linearity	Doublet/singlets ratio for CEN stained with PI = 1.95-2.05 detected off the 488-nm laser or Hoechst = 1.95-2.05 detected off the 405-nm laser
Forward and Side Scatter Sensitivity	Sensitivity enables separation of fixed platelets from noise, identification of bacteria, and 0.5-micron beads.
Forward and Side Scatter Resolution	Scatter performance is optimized for resolving lymphocytes, monocytes, and granulocytes.
Sample Acquisition Rate	Maximum acquisition rate: 70,000 events per second with 8 parameters, 12 compensation pairs. Maximum rate < 70,000 events per second with more parameters, > 100,000 events per second with fewer parameters.
Sorting options	<p>Two- and four-way sorting into microtubes, 12 X 75, and 15 mL tubes</p> <p>ACDU (automated cell deposition unit) for sorting into multiwell plates and onto microscope slides</p> <p>Sample injection chamber for various sample input tubes, including microtubes, 12 X 75, and 15 mL tubes. Includes sample agitation and temperature control.</p> <p>Sterile sorting of events.</p>

Description	Specifications
Nozzle selection and design	An expanded set of nozzles lets users sort a wide range of particle sizes. Four nozzle sizes are supported: 70, 85, 100, and 130 microns.
Features	12 parameters, Forward scatter, side scatter, six fluorescent detectors off 488-nm, two fluorescent detectors off 633-nm, and two fluorescent detectors off 405-nm

Lasers and filters:

Laser line/color (Excitation)	Detector	Emission Filter (nm)	Example of available markers
488 nm / Blue Coherent Sapphire solid-state laser, 22 mW	A	780 / 60 (Infra-Red)	PE-Cy7
	B	695 / 40 (Red-FarRed)	PerCP-Cy5-5
		675 / 20 (Red-FarRed)	PerCP
	C	616/23 (Red)	PE-TxRed
	D	585 / 42 (Orange-Red)	PE, PI
	E	530 / 30 (Green)	Alexa Four 488, FITC, GFP, CFSE, Sytox Green, YFP, BOBIPY, Oregon Green, Pico Green
	F (SSC)	488 / 10	SSC
	FSC	-	FSC
633 nm / Red JDS Uniphase Helium Neon laser, 20 mW	A	780 / 60 (Infra Red)	APC-Cy7
	B	660 / 20 (Red)	APC, Alexa Flour 647

Laser line/color (Excitation)	Detector	Emission Filter (nm)	Example of available markers
405 nm / Violet Coherent VioFlame solid-state laser, 25 mW	A	530 / 30 (Green)	AmCyan, Cascade Yellow, Alexa Fluor 430
	B	450 / 40 (Blue)	Cascade Blue, Pacific Blue, Hoechst, DAPI, Alexa Fluor 405

Figure 2-5 Emission spectra of commonly used fluorochromes

