

Curtin Health Innovation Research Institute | CHIRIFlow Shared Resource
Flow Cytometry Analyser Standard Instrument Configuration Guide

LSRFortessa (Hydrodynamic focusing)



LSRFortessa Flow Cytometer Specifications:

- 5 laser system: UV / Violet / Blue / Red / Yellow-Green
- Measures 18 fluorescence parameters simultaneously
- Sample up to 20,000 events/second
- High power instrument
- Great sensitivity, detects platelets from noise
- Accommodates dyes excited by Violet and UV lasers
- Complementary technology to CHIRI Microscopy Suite

CHIRI Shared Resource Flow Cytometry Laboratory				
LSRFortessa Cell Analyser 5-lasers, 18-fluorescence detectors				
Standard Instrument Configuration Guide				
[Laser Order] ≈ Time Delay	Parameter Name	Standard Bandpass Filters	Dichroic Mirrors	Commonly Used Fluorophore
Ultra-Violet [UV] Laser λ = 355nm, power = 20mW				
[1]	UV_379/28	379/28	No LP	BUV395
TD=-60.00±5.00	UV_515/30	515/30	450LP	BUV496, DAPI, Hoechst, AF350, Indo-1 (violet)
	UV_740/35	740/35	690LP	BUV737
	UV_820/60	820/60	770LP	BUV805
	Violet [V] Laser λ = 405nm, power = 50mW			
[2]	V_450/50	450/50	No LP	BV421, V450
TD=-30.00±5.00	V_525/50	525/50	475LP	BV510, V500
	V_610/20	610/20	600LP	BV605
	V_655/8	655/8	630LP	BV650
	V_710/50	710/50	690LP	BV711
	V_780/60	780/60	750LP	BV786
Blue [B] Laser λ = 488nm, power = 50mW				
[3]	SSC	488/10	No LP	Side light scatter (SSC)
TD=0.00	B_530/30	530/30	505LP	FITC, BB515, AF488
	B_695/40	695/40	685LP	PerCP-Cy5.5
Red [R] Laser λ = 640nm, power = 40mW				
[4]	R_670/14	670/14	No LP	APC
TD=30.00±5.00	R_730/45	730/45	710LP	AF700
	R_780/60	780/60	750LP	APC-Cy7, APC-H7
Yellow-Green [YG] Laser λ = 561nm, power = 50mW				
[5]	YG_582/15	582/15	600LP	PE
TD=60.00±5.00	YG_610/20	610/20	685LP	PE-Texas Red, PI
	YG_780/60	780/60	750LP	PE-Cy7
Note: This is not an exhaustive list of fluorophores or filter options, please contact CHIRI Flow Cytometry Staff if you need assistance checking the details of your panel or if you want to alter the LSRFortessa's standard instrument configuration.				