BeamCyte™ Flow Cytometer

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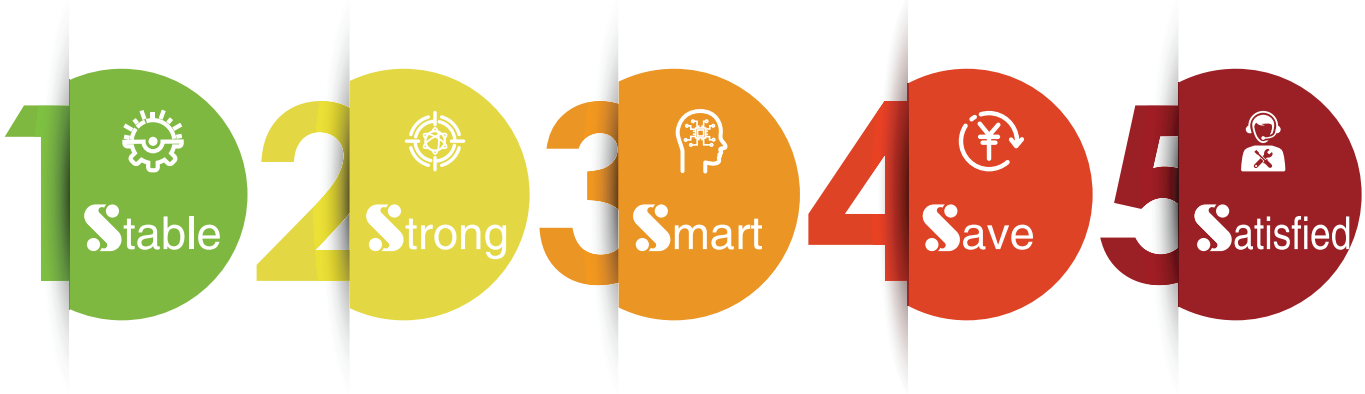
The configuration of BeamCyte™ is Flexible , and can be upgraded from the original machine. Automatic high flux sampling system could be compatible with standard 40 flow tube racks as well as 96-well plates. Sample preprocessor would be cascaded to the machine and to realize analytical automation process

BeamCyte™ Configuration List

Configuration			488 nm Laser				638 nm Laser	
No. of lasers	Fluorescence channels	Total No. of channels	FITC	PE	PerCP	PE-Cy 7	APC	APC-Cy 7
			530/30 BP	585/42 BP	700/54 BP	785/55 BP	660/20 BP	785/55 BP
1	4	6	•	•	•	•		
2	4	6	•	•	•		•	
2	6	8	•	•	•	•	•	•

Stable, efficient , low-consumption and intelligent flow cytometer provides “5S” standard solution for your analysis

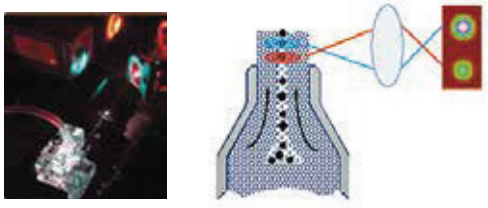


Stable

Semiconductor laser with the function of TEC temperature control, the wavelength of two lasers : 488 nm, 638 nm; standard power 20 mW, and 40 mW / 60 mW can be customized. Lasers can provide efficient and stable source to maintain the uniformity of sample analysis and achieve standardization.

Technology of Independent Development lasers

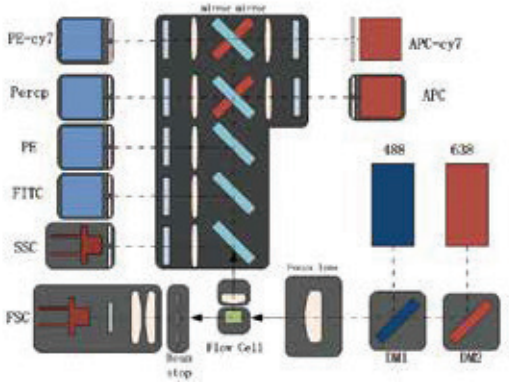
The excitation and receiving of solid spatial is separated (Patent design), so that there is no crosstalk between the channels from different laser, and the adjustment of the compensation is simplified.



Spatial coupling technique

WDM module (independent patent), with the optical path design Locked and fixed, which maintains the high stability and high precision of the optical path after vibration, to ensure the stability of the detection signal.

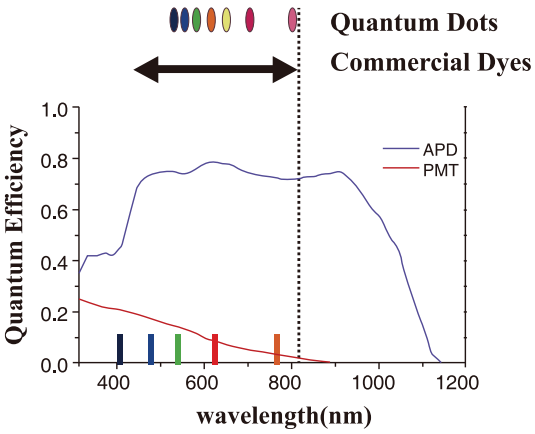
High performance filters reduce signal loss and effectively collects weak fluorescence signal.



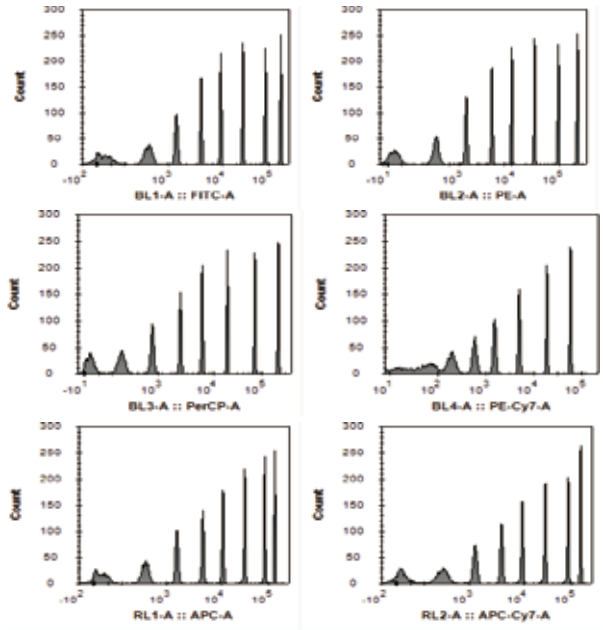
Strong

Avalanche photodiode detector (APD), has higher incident photon-to-electron conversion efficiency (IPCE) , as well as lower electronic noise. Stable performance helps improve the resolution and fluorescence sensitivity of the instrument, to ensure the repeatability of analytical results and realize the standardization .

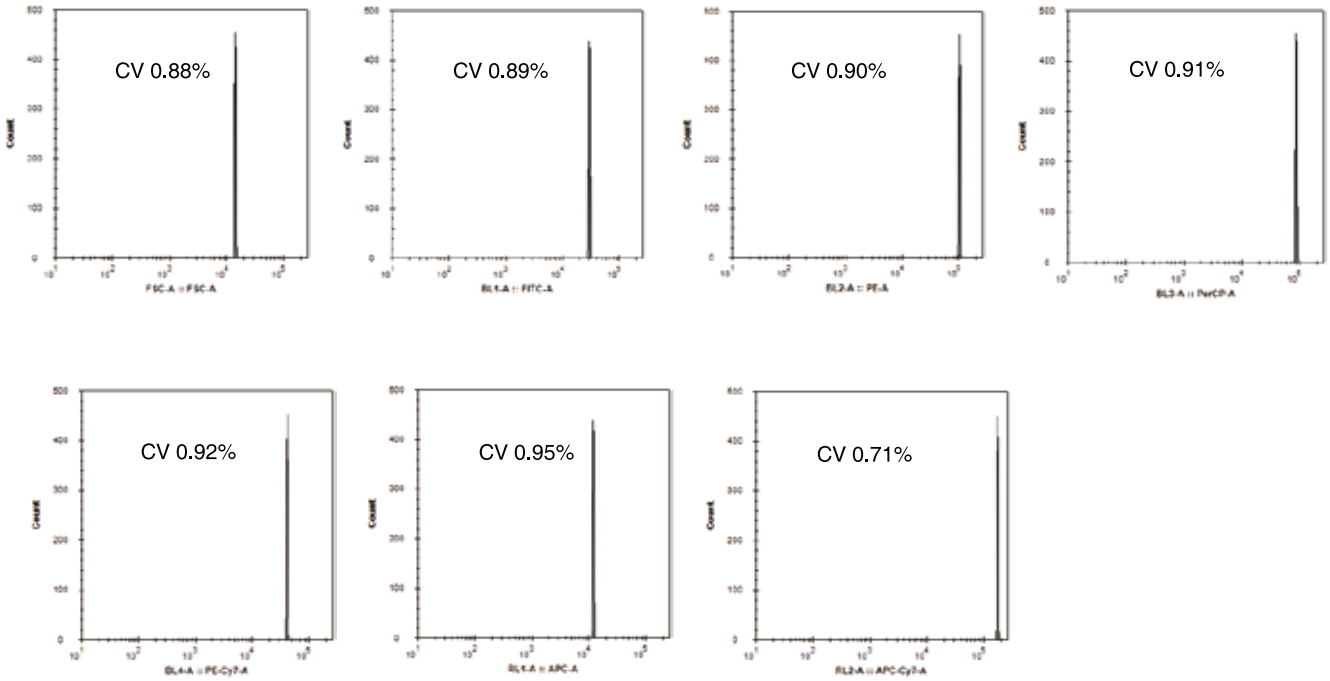
Higher fluorescence sensitivity ensures that weak fluorescence signal can be detected.



Quantum Efficiency for the R3896 PMT and the RMD avalanche photodiode (APD) as a function of wavelength.



Based on the sensitivity detection of Spherotech RCP305A Rainbow 8 Peaks microsphere, 8 peaks can be realized in each channel



Based on the resolution detection of Spherotech UFRP302 Rainbow Single Peak microsphere, CVs of all channels are less than 2%

Smart

Automatic high flux sampling system could be compatible with standard 40 flow tube racks as well as 96-well plates. Sample preprocessor would be cascaded to the machine and to realize analytical automation process.

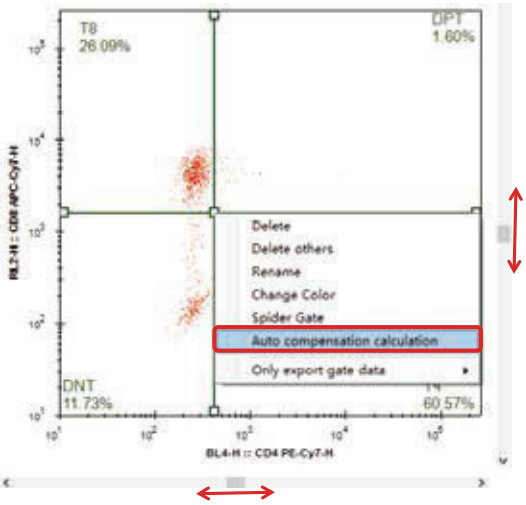
The high-precision sampling pump can accurately control and measure the sampling volume, which can realize the absolute count of the events by volume method with high accuracy.

The software has both English and Chinese version, and the UI interface is simple to learn and easy to operate. Multiple and convenient compensation adjustment can meet comprehensive needs.

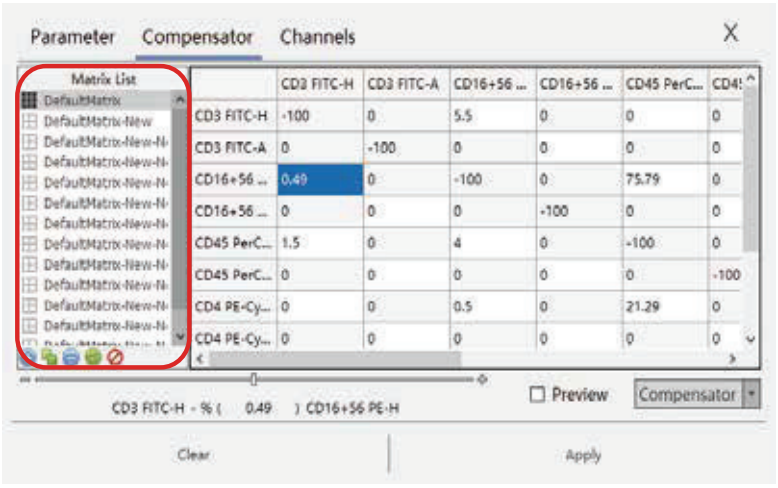
Compatible with clinical LIS software: to facilitate data graphic transmission.

Automated quality control: software would draw Levey-Jennings curve automatically.

Pre-load module upon engineer installation: customers would run standard assays such as TBNK and Cytokine to realize standard processing and data analysis spontaneously.



Quick Compensation &
Auto Compensation Calculation



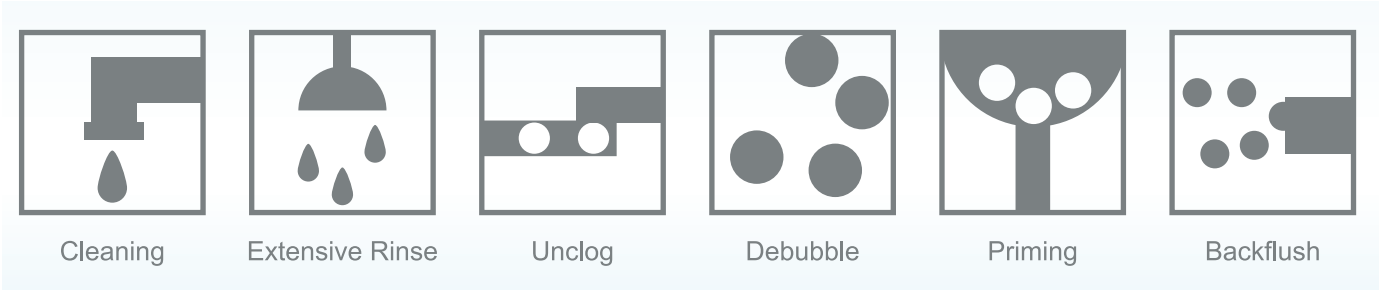
Compensation Matrix List:1 FCS data can set over 10
compensation matrix datas

Save

4 minutes after the instrument is turned on, the samples can be analyzed, and the samples can be loaded automatically to ease the human labor.

Switching on/off process is simple. The sample volume required for analysis is small, and the loss volume of sheath fluid is limited,too.

Automated liquid path maintenance can simplify routine maintenance process and reduce maintenance costs. The instrument has high reliability. (Shown as below)



Satisfied

Training Center

Professional training center with professional training lecturer team, to provide professional training services of application support and hardware maintenance support.

Customer Service Center

All-round clock service, quick response within 24 hours.

Professional Service System

Strong application support and maintenance service team, and perfect service response system would respond to your needs quickly.

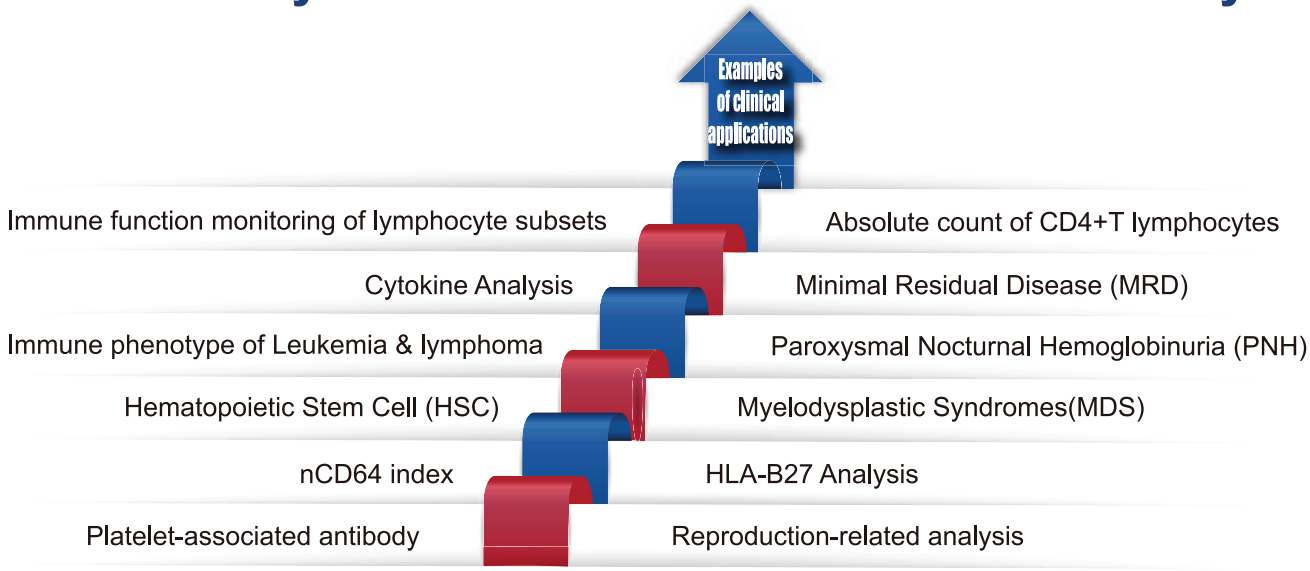
Proactive Care

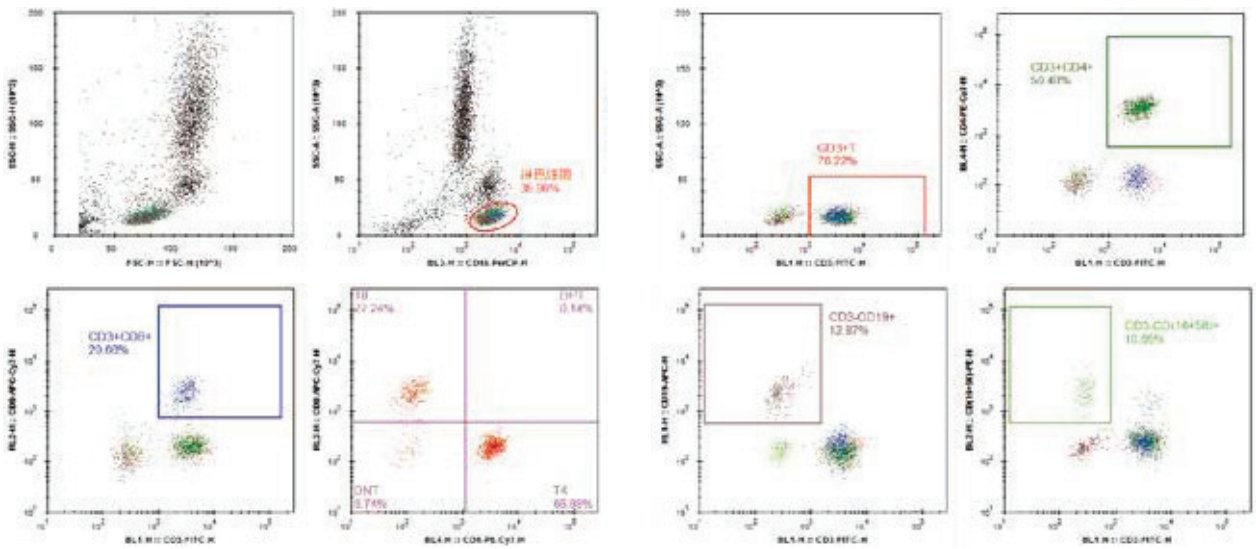
Application support and maintenance service team revisit regularly to ensure the stability of the instrument,and the clinical sample be analyzed efficiently. Communicate thoroughly with customers and collect product optimization suggestions.

Frontier Information

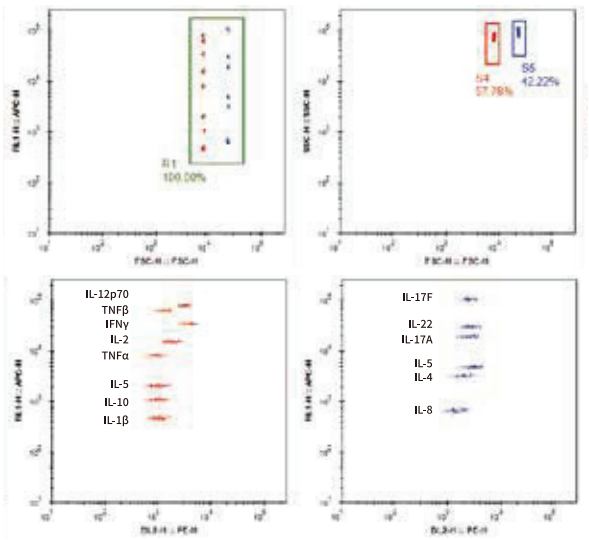
Professional medical team to share the state of art information about the flow cytometer through official wechat account regularly.

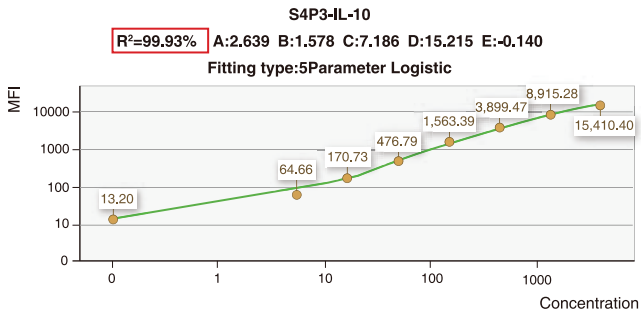
BeamCyte™ Flow Cytometer meets the needs of daily clinical analysis and translational medicine analysis





Lymphocyte subsets Analysis





Cytokine Analysis

BeamCyte™ 1026 Technical Parameters

	Item	Parameters
Optical System	Laser，Power	Semiconductor laser（488nm、638nm）6 Fluorescence channels
		488 nm laser，standard configuration 20mW，optional Configuration 40/60mW 638 nm laser，standard configuration 20mW，optional Configuration 40/60mW
	Filters configuration	488nm laser：530/30 nm BP FITC, 585/42 nm BP PE, 700 BP PerCP/ PE-Cy 5, 785/55 nm BP PE-Cy7 638nm laser：660/20 nm BP APC, 785/55 nm BP APC-Cy7；
	Optics	The excitation and receiving of solid spatial separation.No fiber conduction. Fixed optical path.
	Sensitivity of fluorescence	FITC < 75 MESF； PE < 55 MESF； APC < 55 MESF
	FSC sensitivity	0.5 μm
	SSC sensitivity	0.2 μm
	Range of particles	0.2-60 μm
	Linear	≥ 0.98
	Resolution	CV ≤2%
Fluidics System & Electrical System	Carry-over	≤ 0.1%
	Detector	Avalanche Photodiode Detector(APD)
	Speed	45,000 events/s； 96 - well plates/30min
	Minimum sample volume	10μL
	Speed of sample	15 ~ 235 μL/Min
	Absolute count	Volumetric method; Microspheres method;
	Preheating time	<4min
	Blending mode	Whole plate;single pipe;interval mixing is set freely;
	Tube numbers of leader	40tubes and 96 holes
	Type of tube	Standard flow pipe（12x75mm，5ml），96 - well plates(F,U,V type), Centrifugal tube (1.5ml, 2ml)
	Capacity of Liquid bottle	Waste liquid barrel 6L,Sheath liquid drum 6L,Cleaning liquid drum 1L;
	Maintenance system	Liquid path maintenance automation
Computer Data Analysis System	Software	The software has the edition in English and Chinese. With the function of automatic quality control detection, software can draw Levey-Jennings curve automatically. Support to be connected with clinical LIS software, to facilitate data graphic transmission.
	Feature of software	Automatic saving mode against power failure; Detection and analysis can run at the same time.
	Compensation	Compensation Matrix List; Quick Compensation ; Auto Compensation Calculation; Auto Compensation;
	FCS format	FCS 3.0
Installing Environmenta Conditions	Volume	The host system: 44 x 43.5 x 52 cm(W x D x H cm); The host system with leader: 57.2 x 53.3 x 52 cm(W x D x H cm); Liquid tray: 44 x 32 x 45 cm(W x D x H cm);
	Weight	The host system: 32 Kg;The host system with leader: 38 Kg;Liquid tray: 7 Kg;
	Operational environment	10 - 35°C，15-80 % RH
	Voltage	220 V~,50Hz
	Computer operating system	Win10 pro