Flow Cytometer
ZS-AE7S
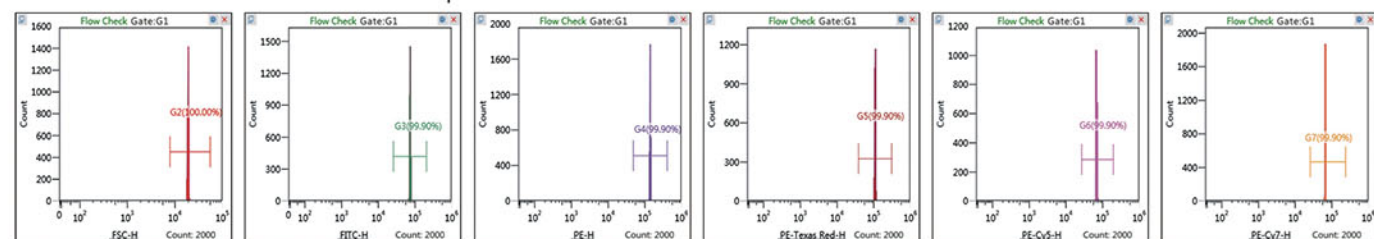
Introduction:

Flow cytometer is a high-precision analytical and sorting instrument widely used in life sciences, medicine, immunology, and other fields. It integrates fluid mechanics, optics, electronics, and computer technology to rapidly analyze and sort individual cells (or particles) in a liquid suspension. By detecting scattered light signals and fluorescent signals from cells labeled with specific probes, the instrument can quantitatively measure multiple physical and chemical properties of cells (such as size, granularity, surface antigens, and intracellular components) at a speed of thousands to tens of thousands of cells per second, enabling high-throughput, multi-parameter, and non-destructive cellular analysis.
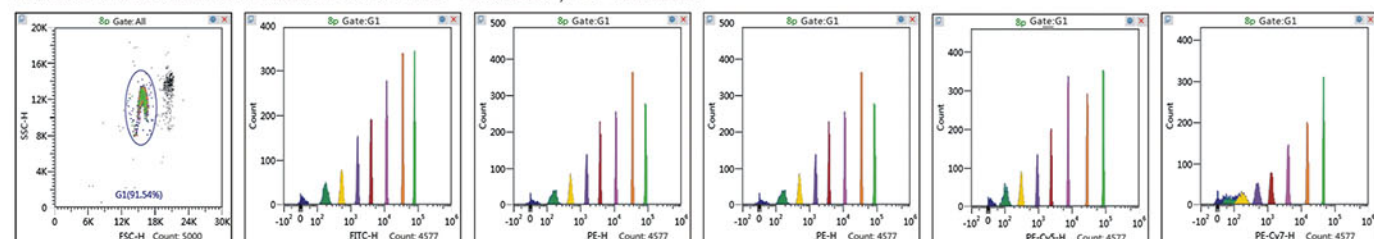
Features:

Accuracy
Excellent instrument resolution ratio: full peak width CV<2%

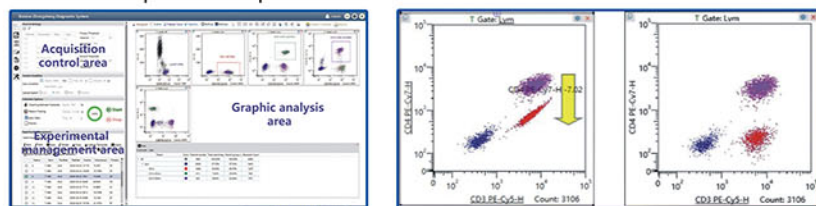Excellent fluorescence detection limit: FITC < 50MESF,PE < 30MESF

Efficiency
32-tube rotary automatic loading module

Continuous testing speed up to 32 tests/0.5h.
Instrument Control, Item Control, Easy to use

User-friendly
English Software, easy to learn
Graphical Fluorescence Compensation Tool
One-click imported template

Main Clinical Application Item
● Lymphocyte Subset T/B/NK Analysis.
● Absolute count of CD4+T lymphocyte.
● Cytokine Th1/Th2/Th17 Analysis.
● HLA-B27 detection for AS.
● Application of flow cytometry in reproduction.

Recommended Reagent Information:

Item	Recommended Reagent	Application Department
Lymphocyte Subset T Analysis	CD45 CD4 CD3 CD8	Clinical Laboratory Infectious Disease Department
Lymphocyte Subset T/B/NK Analysis	CD45 CD3 CD16 CD56 CD19	Oncology Department Department of Rheumatology and Immunology Department of Pediatrics Blood Specialty
Absolute Count of CD4+T Lymphocyte	CD45; CD4 CD3; CD8	CDC (AIDS) Infectious Disease Department
Cytokine Th1/Th2/Th17 Analysis	Th1: IL-2, IFN-γ, TNF-α Th2: IL-4, IL-6, IL-10 Th17: IL-17	Infectious Disease Department Oncology Department Department of Rheumatology and Immunology Department of Organ Transplantation Respiratory Department
HLA-B27 Detection for AS	HLA-B27-FITC HLA-B7-PE IgG2a-FITC IgG1-PE	Department of Rheumatology and Immunology Orthopedics
DFI Analysis	Acridine orange (AO) Staining Solution	Reproductive Department; Infertility Department Reproductive Medicine Centre

Parameters:

Model	ZS-AE7S
Laser	488nm solid (60mW)
Detector	FSC, SSC, FL1-FL5
Fluorescence Channel	FL1:525/50 (FITC); FL2:585/40 (PE); FL3:630/30 (PE-Texas Red/ECD/PI); FL4:697/60 (PerCP/PE-Cy5/PE-Cy5.5); FL5:780/60 (PE-Cy7)
Fluorescence Sensitivity	FITC≤50 MESF, PE≤30MESF
Fluorescence Linearity	≥0.99
FSC Sensitivity	≤1μm
Test Particle Size	0.2~50μm
Carry Over	≤0.5%
Instrument CV	FSC and all FL channel CV less than 2%
FSC and SSC CV	Can separate red blood cells and platelet, can separate white blood cells into 3 groups
Test Speed	≥46000 cells/s
Minimum Sample Vol	90μL
Measure Range	Maximum Support 10^7
Threshold	Double threshold, minimum cells fraction
Fluorescence Compensation	Support auto online compensation, offline compensation and visualized compensation
Item Template	Support Item template, acquisition conditions/fluorescence compensation one-click use
Intake Method	Manual intake; Rotary wheel auto-sampling with auto-mixing function:32tests/wheel
Liquid Storage Station	Sheath bottle, waste bottle, shutdown liquid bottle 2L, cleaning liquid bottle 0.5L
Software	English/Chinese
PC	Dell (CPU i5/8G DDR4/1T hard disk) +Dell 27 inches monitor
Power Supply	AC220/110V±10%, 50/60Hz
Optional	Auto-sampler
External Size(W*D*H)	430*500*330mm; 650*500*330mm(with autosampler)
Net Weight	30kg; 35kg(with autosampler)
Packing Size(W*D*H)	Main Instrument: 860*635*648mm; Accessories: 860*680*810mm; Reagent: 405*270*400mm
Gross Weight	Main Instrument: 56kg; Accessories: 54kg; Reagent: 16kg