

COUNT ACCURATELY AND ANALYZE EASILY AT YOUR BENCH

# ADAMI™ LS

FLUORESCENCE CELL ANALYZER



Total cell counting / Viability / Cell size

Fluorescence expression (GFP/RFP/DAPI)

Apoptosis assay

Cell cycle assay

# ADAMII™ LS

Fluorescence cell analyzer for life science and cell biology

**ADAMII™-LS**, versatile fluorescence cell analyzer based on 4-channel (bright field, GFP, RFP, and DAPI) for life science laboratory, allows users to perform lots of assays for cells including cell counting (total & nucleus), viability, fluorescence expression, apoptosis, cell cycle and similarity to flow cytometer.

**Broad  
Application**

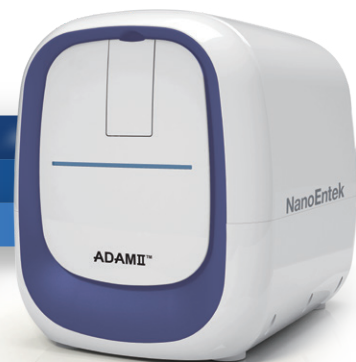
**Dot Plot  
intensity**

**3 FLs  
GFP/RFP/DAPI**

## KEY FEATURES & BENEFITS

- Accurate measurement  
(The ability to capture up to 75 images)
- Versatile application
- Similar result to Flow cytometer  
(Histogram & Dot plot)
- Convenient use  
(Easy simple staining and assay)

Accurate measurement  
Absolute counts  
High reproducibility



## Versatile application, convenient use, and accurate result

**ADAMII™-LS**, is convenient to set up and analyze cells easily without intensive training and effort. Everyone can run any cell-based assay required for high accuracy and low variation (CV%).

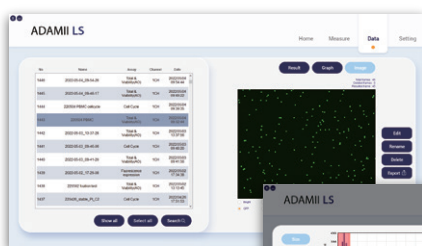
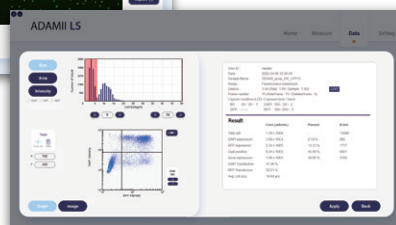
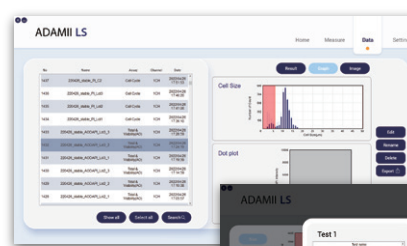


Image-based cytometer



Apoptosis assay



Total cell counting /  
cell viability / cell size



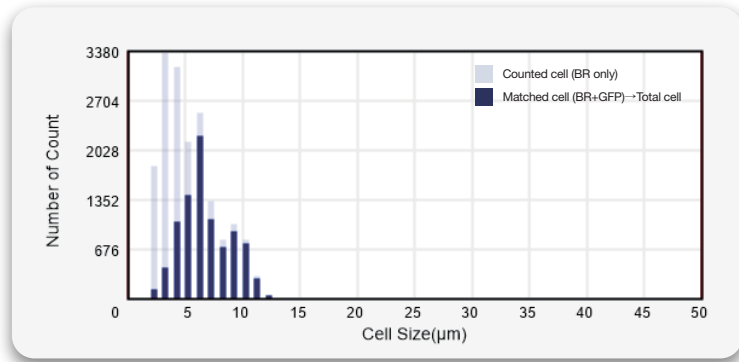
Cell cycle assay

# ADAMI™-LS, Image-based fluorescence cell analyzer

## Total cell counting / Viability

In a PBMC sample with RBC and platelets, only nucleus cells (lymphocyte) are counted through fluorescence staining. It shows better performance than the trypan blue staining method commonly used. By mixing acridine orange (AO, cell permeable dye), and DAPI reagent (impermeable DNA dye), the total cell number and viability of the dyed fluorescence image can be measured accurately compared to the trypan blue staining method.

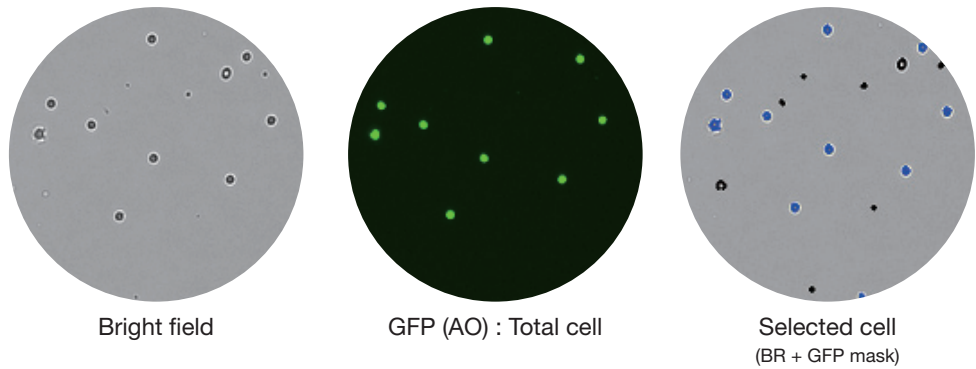
Sample: PBMC



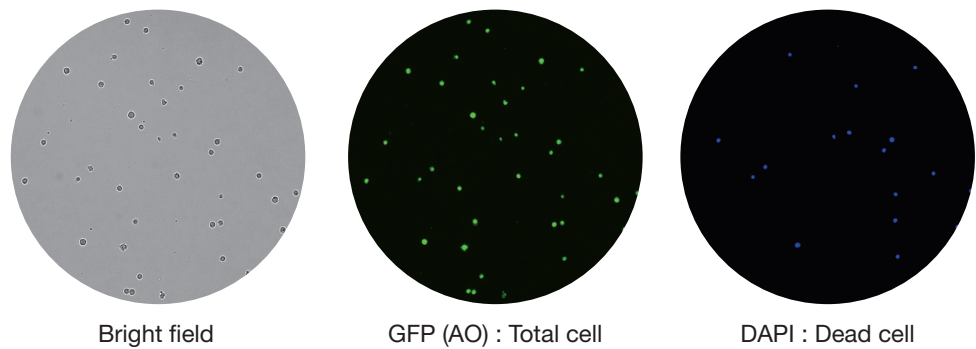
\* Remove debris by double checking (BR + GFP)

Total cell

(BR & GFP counting)  
(Magnified)

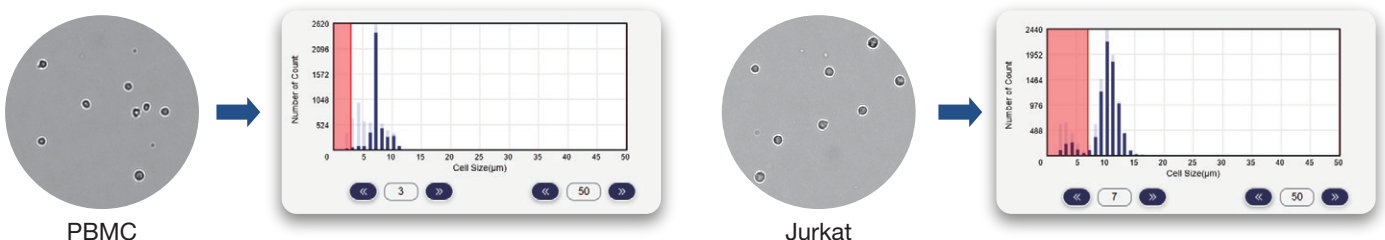


Viability



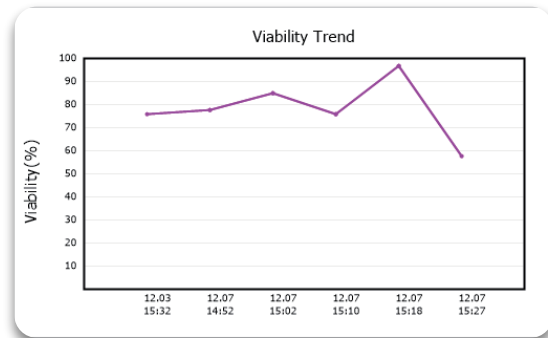
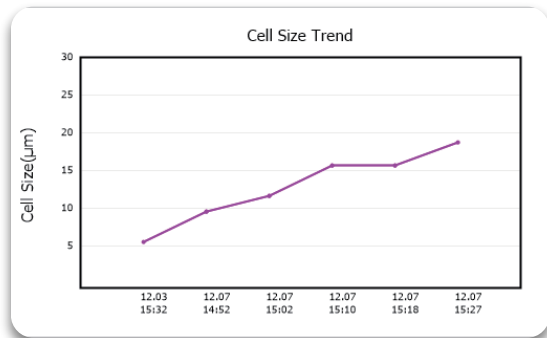
## Cell size gating

ADAMI™-LS provides accurate cell size data measured by 10x lens. The photographed cells are analyzed according to their size and produce histograms. By performing cell size gating according to the size of each cell type, can get only the desired cells and obtain accurate values for cell size.



## Cell size & Viability trend curve

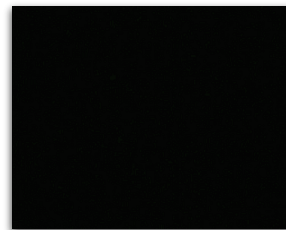
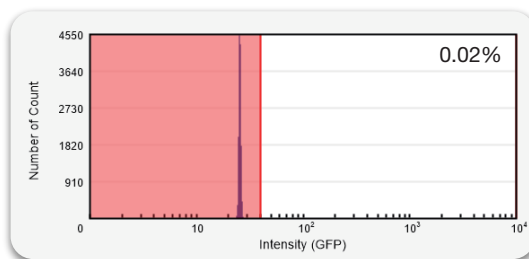
User can compare and monitor cell size or viability by selecting the desired datum during a specific period. These trends could be helpful to see cell behavior and to decide the time point to harvest or treat.



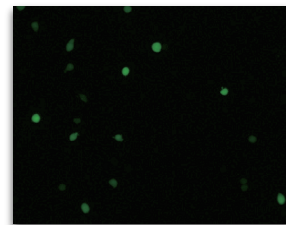
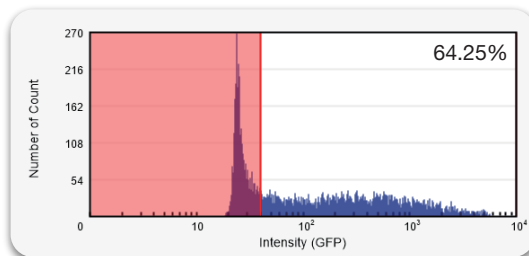
## Fluorescence expression

Through the dot plot, single channel result, and double channel result, it is possible to measure various fluorescence reagents and cell samples desired by the user.

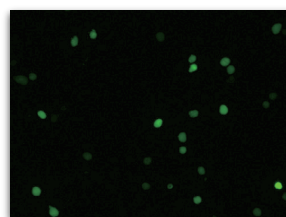
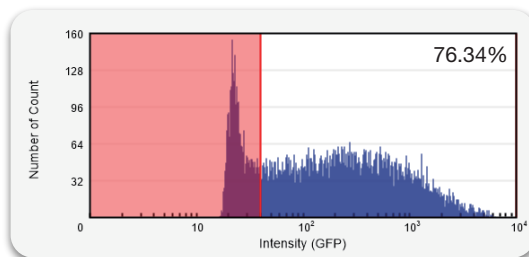
**No transfection**



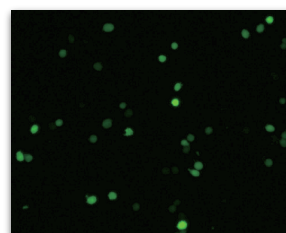
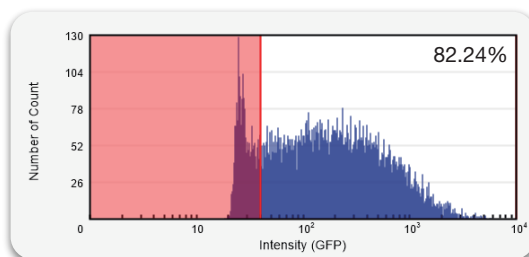
**24 hrs**



**48 hrs**



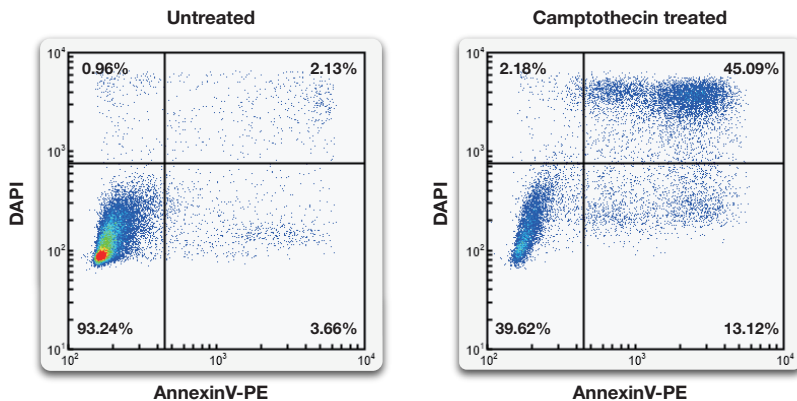
**72 hrs**



Hela cells transfected with GFP

## Apoptosis

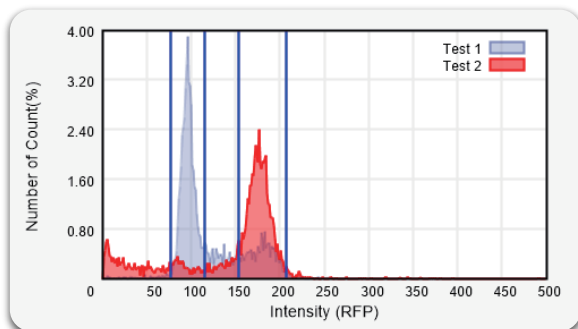
Apoptosis is programmed cell death which can be analyzed using Annexin V and DAPI reagent. Annexin V binds with phosphatidylamine on the plasma membranes. DAPI has the ability to binding DNA in the cells. Through two fluorophores, early and late apoptotic cells are detected with the dot plot.



Jurkat cells treated with Camptothecin

## Cell cycle

Cell cycle with PI cell cycle reagent produces cell cycle histogram, which is similar to flow cytometer (FACS), and cell cycle comparison which checks the cell cycle change compared to the control group.



	Test 1		Test 2	
	Conc. (cells/mL)	%cells	Conc. (cells/mL)	%cells
Total cell :	9.39 x 10E5		8.36 x 10E5	
G0/G1 phase :	5.47 x 10E5	58.30 %	6.62 x 10E4	7.92 %
S phase :	1.42 x 10E5	15.11 %	7.59 x 10E4	9.08 %
G2/M phase :	2.08 x 10E5	22.19 %	5.10 x 10E5	61.03 %

Jurkat cells treated with Etoposilone B

### Specification

Item	Description
Lens	10 x
Light source	Bright field, UV, Blue, Green LED
Analysis time	App. 2 min ~ 4 min 30 sec *
Loading volume	25 µL
Measuring volume	≤ 7.8 µL
Measurement range	5 x 10 <sup>4</sup> ~ 5 x 10 <sup>6</sup> cells/mL
Dimension	300 mm (W)x 420 mm (D)x 370 mm (H)
Weight	19.3 kg

\* Depends on assay or frame.

### Ordering information

Cat. No.	Product name	Contents
ADAMII-LS	Fluorescence cell analyzer	• Main instrument, Labtop
ALAD-100	Cell viability reagent	• Acridine orange (AO) & 4',6-diamidino-2-phenylindole (DAPI) stain 0.5 mL x 2 tubes (100 Tests)
ALPI-100	PI cell cycle reagent	• Propidium Iodide (PI) stain: 1.25 mL x 2 tubes (100 Tests)
ALAP-100	Apoptosis detection kit	• AnnexinV-PE stain 0.5 mL x 1 tube (100 Tests) • DAPI solution: 125 µL x 1 tube (100 Tests) • AnnexinV binding buffer 10 mL x 1 tube (100 tests)
A2AS-051	ADAMII Assay slide	• 1 ch x 50 slides/ case

Nous contacter