

Specifications



ADAM™ MC Plus & CellT Plus

Hardware	
Measuring range	5×10 ⁴ ~ 2×10 ⁷ cells/mL
Optimal range	4×10 ⁵ ~ 1×10 ⁷ cells/mL
Analysis time	fast mode 10 sec / test real cell size mode 30 sec / test
Measuring volume	3.2 μL
Focus	Auto-focusing
Objective lens	4 X
Weight	7.0 kg
Dimensions (W × D × H)	277 x 276 x 270 mm

AccuPlus Slide & Reagent

Performance	
Staining method	Acridine orange (AO) & 4',6- diamidino-2-phenylindole (DAPI) stain
Sample loading volume	15 μL/test

Ordering Information

Cat. No.	Description	Contents
ADAM-MC Plus	Fluorescence cell analyzer	<ul style="list-style-type: none"> Main device User manual
ADAM-CellT Plus	Fluorescence cell analyzer for cGMP	<ul style="list-style-type: none"> Main device User manual 21 CFR PART 11 requirement support appendix
APAD-400	Cell viability reagent	<ul style="list-style-type: none"> 1 mL x 6 tubes (400 Tests)
AP4S-100	AccuPlus Slide 4ch.	<ul style="list-style-type: none"> 4ch. Slide 100 ea



» **MC Plus**
For R&D

» **CellT Plus**
For cGMP

ADAM™ MC Plus & CellT Plus

Most Accurate Fluorescence Cell Counter

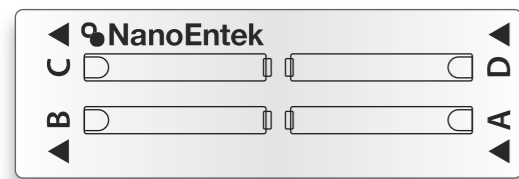
- | | |
|---------------|---------------------------------------|
| PBMCs | 10 sec per test |
| Stem cells | 15 μL sample loading volume |
| Primary cells | 3.2 μL measuring volume |
| Cell lines | 13 captured images per channel |

ADAM™ MC Plus & CellIT Plus are

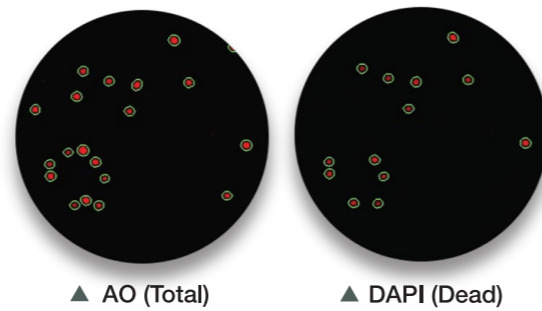
the highly accurate automated fluorescence cell counter equipped with bright field and two fluorescent channels (AO/DAPI).

ADAM™ MC Plus is used for R&D, ADAM™ CellIT Plus is available in cGMP production environment.

4 tests on 1 slide

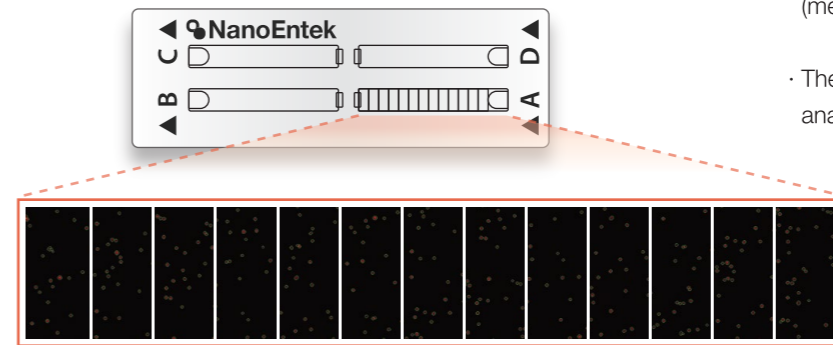


Bright field & Dual fluorescence (AO/DAPI)



Large measuring volume

13 images
3.2 µL measuring volume

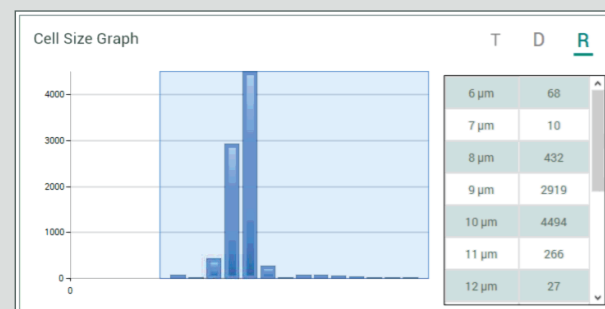


Large measurement volume obtained by detecting multiple images of the samples through moving stage provides more accurate results compared to other manufacturers' products.

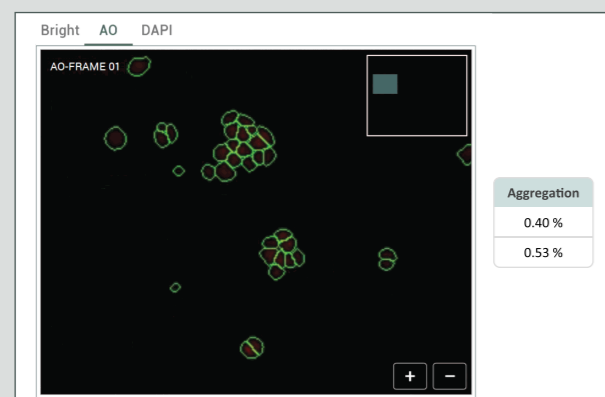
- Cell counting accuracy depends on the counting volume (measurement volume).
- The obtained multi-images are processed by image analysis software integrated inside the system.

ADAM™ MC Plus & CellIT Plus

ADAM™ MC Plus & CellIT Plus measures the number of total cells, viable cells, non-viable cells and shows viability results. In addition, they analyze the cell size and cell aggregation ratio as well.



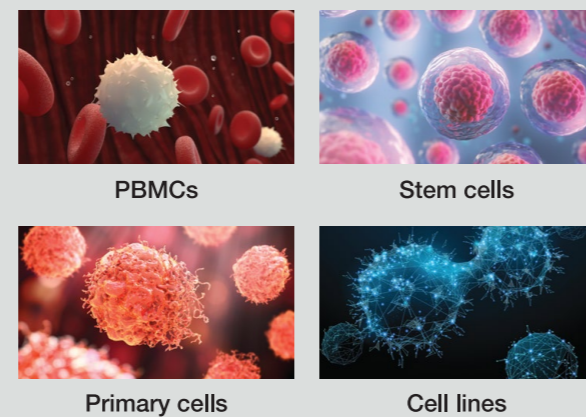
▲ Cell Size



▲ Cell aggregation ratio

Applicable to a various cell lines

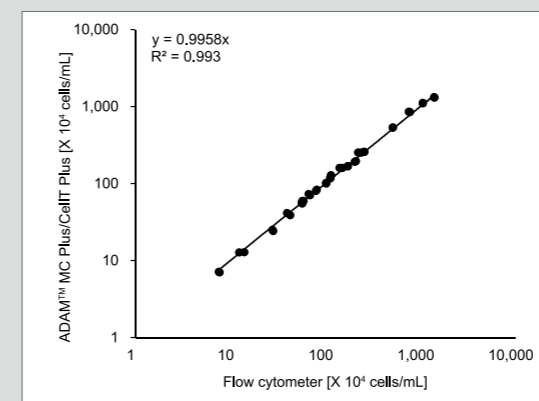
It is possible to use ADAM™ MC Plus & CellIT Plus depending on the cell types (PBMCs, etc.) that needs to be monitored during the manufacturing of cell therapy products.



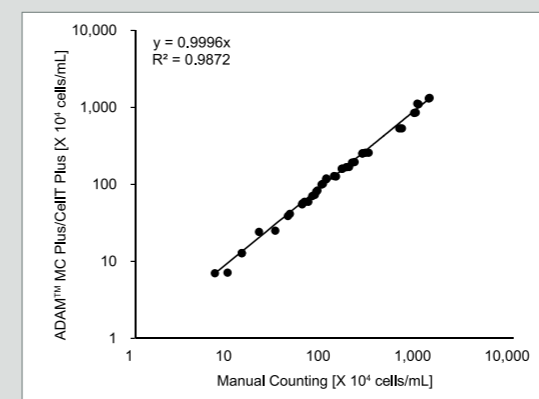
PBMCs Clinical immunology	Stem cells Regenerative medicine
Primary cells/Cell lines Basic research	Splenocytes Vaccine development

Accuracy & Repeatability

Correlation of PBMCs total counting between flow cytometry, manual count and ADAM™ MC Plus & CellIT Plus.

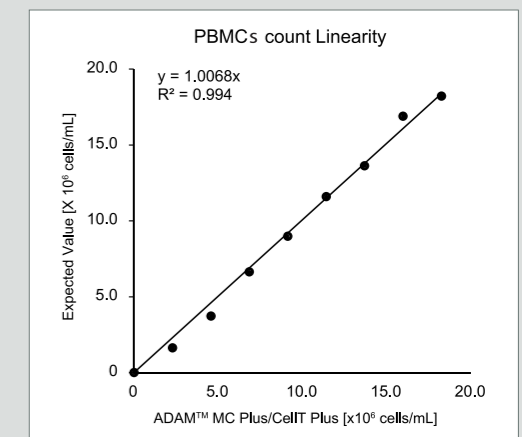


Data were compared between flow cytometer and ADAM™ MC Plus & CellIT Plus results in 20 different PBMCs concentration samples.



Data were compared between manual count and ADAM™ MC Plus results in 20 different PBMCs concentration samples.

Linearity & Reproducibility



A high-concentration (1.8E+07 cells/mL) of PBMCs was diluted and a dilution series was counted by ADAM™ MC Plus & CellIT Plus. It shows excellent dilution linearity and reproducibility.

	High	Medium	Low
Mean	1.8.E+07	9.0.E+06	1.6.E+06
SD	2.7.E+05	2.3.E+05	3.8.E+04
CV (%)	1.5 %	2.5 %	2.3 %

Sample with low, medium and high concentration of PBMCs were counted with three ADAM™ MC Plus & CellIT Plus.

Various applications

Accurate result