



SeekMate Tinitan™

Fluorescence Cell Counter



**A Smart Tiny Titan Is
Counting Cells**

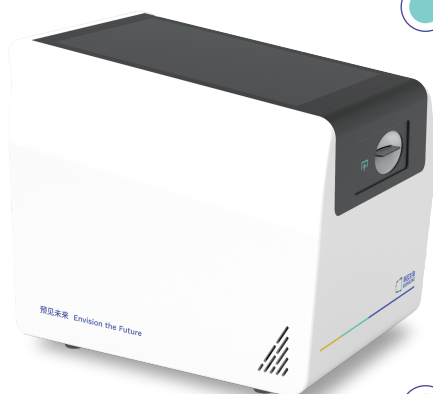
Compact size
Intelligent detection



SEEKGENE

SeekMate Tinitan™

SeekMate Tinitan™ FL is a high-performance automated fluorescence cell analyzer designed around dual-mode brightfield and fluorescence imaging. Built with the latest optical components and an advanced triple-focus imaging system, it delivers clear, high-quality images for reliable cell analysis. The instrument integrates AI-driven image processing and customizable parameters, enabling accurate detection and quantification of a wide range of cell types* — including primary cells from tissues such as liver, lung, and brain, isolated nuclei, PBMCs, and established cell lines (excluding bacteria and fungi). The device is compact and compatible with mobile power source, making it convenient to carry outdoors for cell counting work in any laboratory setting. SeekMate Tinitan™ FL is a handheld “counting expert” with precise counting, full function, flexibility and convenience.



Compact size

Triple focusing mode

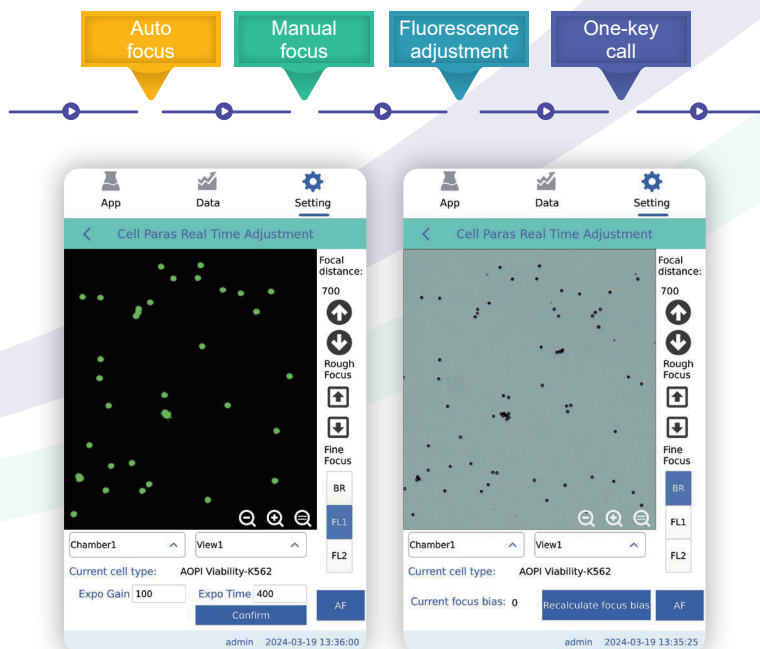
Well-trained AI

Sample-saving

Type-C interface

Triple focusing mode

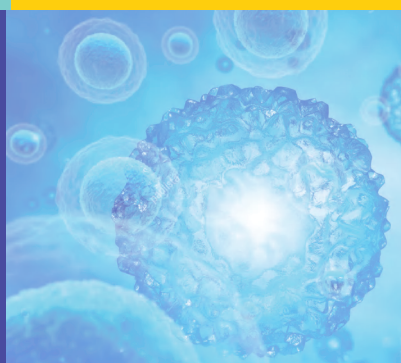
The triple focusing mode combines fixed, automatic and manual focusing, specifically designed for primary cells and special samples. By presetting optimal focusing parameters, it achieves automated accurate counting, overcoming challenges like diverse cell types, varying sizes, irregular shapes, poor compatibility with fluorescent dyes, and interference from impurities and debris.



Brightfield and Fluorescence image view of K562 cells

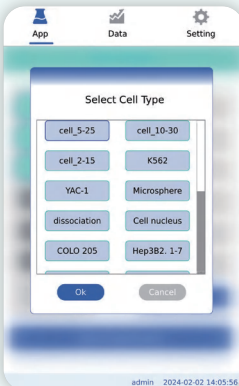
More diverse cell types

With its broad applicability to cell sizes ranging from **0.5 to 180 μm** , SeekMate Tinitan™ FL has been successfully validated across diverse cell cultures, including primary cell lines and PBMCs.



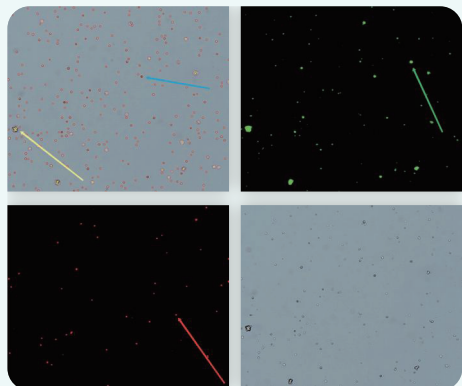
Well-trained AI algorithm

Utilizing a database of nearly **10,000** cell images to train dozens of cell detection parameters with one-touch access, it provides rapid detection and intelligent classification of cell aggregation, impurities, fragments, and cells with no nucleus.



Select a cell type to preset parameters in the database.

*Cell_5-25 refers to the general setting for cells with diameter ranging from 5 μm to 25 μm .



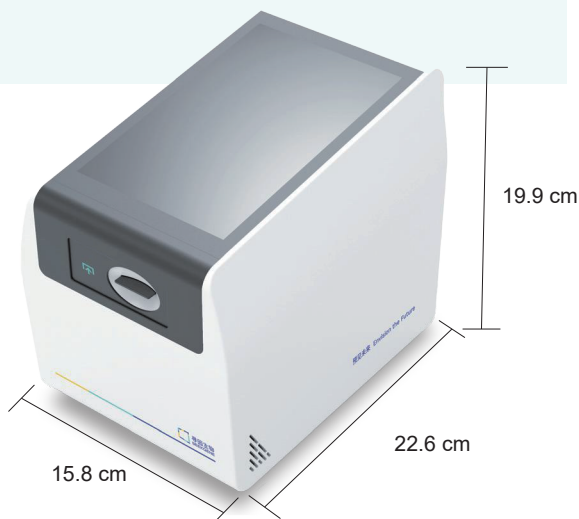
Cells stained by AO/PI. The live cells are shown in green fluorescence, and the dead cells are shown in red fluorescence. The blue arrow indicates the cells and the cell clumping is pointed by the yellow arrow

Compact all-in-one design

The all-in-one machine package eliminates the need for an external computer, saving experimental space. With a compact body of **22.6*15.8*19.9 cm**, it is more convenient to carry outdoors. The 8-inch touchscreen provides a beautiful interface with clear graphics and flexible operation.

User-friendly Type-C power interface

The Type-C power interface is compatible with power bank (20V 3.25A), extending continuous outdoor operation.



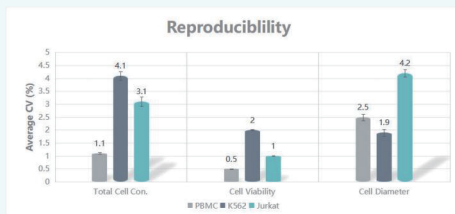
The compact size of Tinitan saves your lab bench space



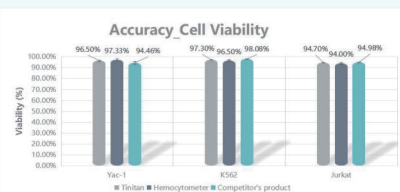
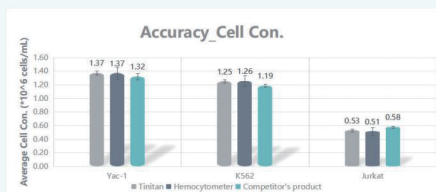


Accurate and stable counting

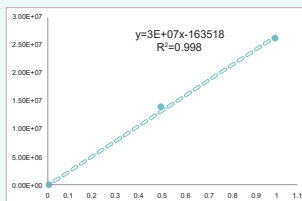
Validation studies using the SeekMate Tinitan™ FL and a hemocytometer have shown excellent accuracy and repeatability across various cell types, with CV values $\leq 5\%$ and a linear correlation coefficient exceeding 99%.



Great reproducibility was indicated for Tinitan through 10 repeated testings using PBMC, K562 and Jurkat cells, with the CV value of lower than 5%



Testing of Tinitan, hemocytometer, and the competitor's product shows high comparability in cell concentration and viability.



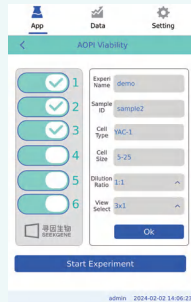
Dilution series of a K562 cell sample. The linear regression value suggests the high accuracy of Tinitan

Multiple savings design

Small sample volume of **10 μ L** saves samples and reagents, reducing consumable costs. Tinitan can handle up to **6** samples simultaneously, automating processes and minimizing manual labor.



10 μ L sample loading to the chip



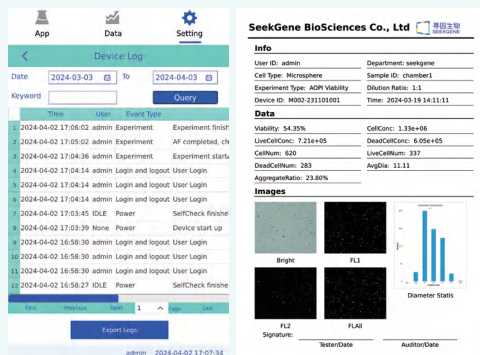
Setting parameters
before detection



Result and image
overview of YAC-1
cell line

Compliance with FDA 21 CFR Part11 regulations

Compliance with FDA 21 CFR Part11 regulations ensures adherence to stringent standards, encompassing multi-level permission management, event tracking, signatures, report generation, and electronic record archiving, guaranteeing data security and integrity.



Technical Specifications

Parameters	Description
Dimensions	22.6 x 15.8 x 19.9 cm
Weight	4.5 kg
Total cell concentration range	1×10^4 - 3×10^7 cells/mL
Optimum cell concentration range	5×10^4 - 1×10^7 cells/mL
Cell size range	0.5 - 180 μ m
Optimum cell size range	2 - 90 μ m
Count mode	Bright-field and Fluorescent
Sample volume	10 μ L
Counting time	Trypan blue 25 s; AO/PI 35 s
Counting fields	3
Sample throughput	6
Fluorescence channels	Ex/Em: 470 nm/535 nm Ex/Em: 525 nm/600 LP
Camera	5 mega pixels
Focus method	Auto + Manual + Fixed
Detected indicator	Cell count, cell viability, cell concentration, nucleation rate, clumping rate, mean cell diameter, transfection rate, growth curve, data comparison
Touch screen	8 inch HD resolution
Data storage	500 G / 1T
Data export method	1 x USB 3.0, Wi-Fi, cloud server
Power supply	Type-C power interface; mobile power with built-in battery
Objective magnification	5X

Ordering Information

Name	Quantity	Art. No.
SeekMate Tinitan™ Fluorescence Cell Counter	1 Instrument	M002C
Cell Counter Chip	50 chips/Kit	SP00022
AO/PI Staining Kit	5 mL/Kit	K01701



Follow our social media to stay ahead with latest advances in single-cell field



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