SEEKGENE

SeekMate Tinitan™

Fluorescence Cell Counter

A Smart Tiny Titan Is Counting Cells

Compact size
Intelligent detection

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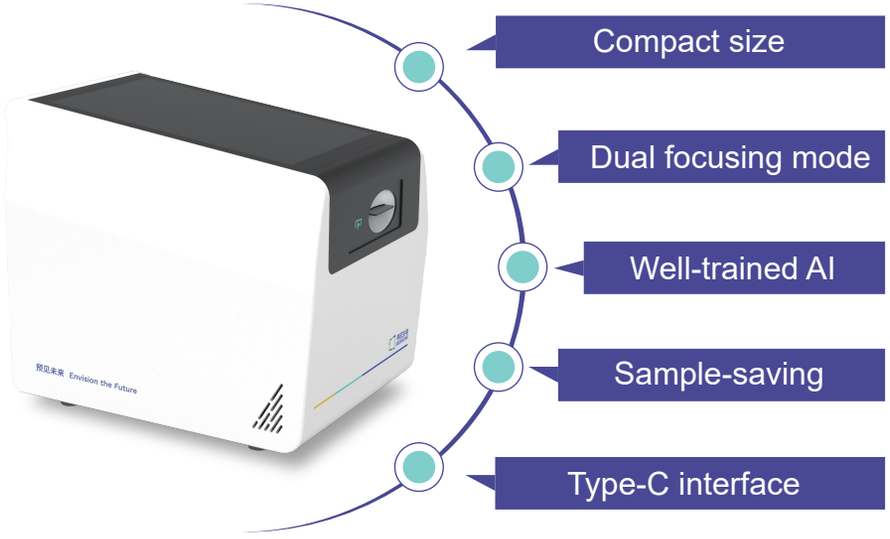
SeekMate Tinitan™

SeekMate Tinitan™ FL is a highly automated fluorescence cell counter developed independently by SeekGene Biosciences. It integrates both bright field and fluorescence modes, offering a cutting-edge solution for high-efficiency fluorescence cell counting. Equipped with the latest optical components and a dual focusing mode, it captures super clear images. The incorporation of AI deep learning and personalized parameter adjustment provide accurate and stable cell counting solutions for various cell types (including primary cells and cell nuclei). The device is compact and compatible with mobile power sources, 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.



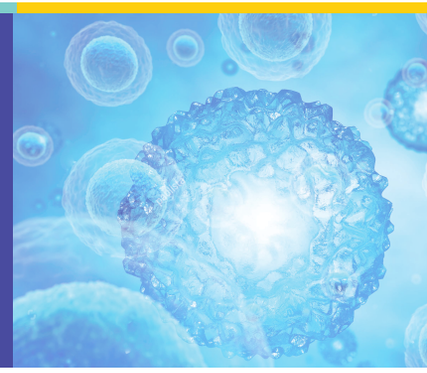
Dual focusing mode

The dual focusing mode combines 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

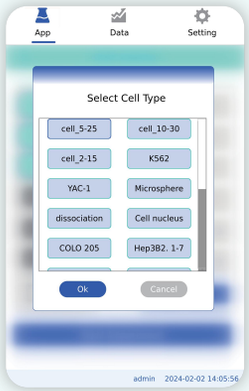
More diverse cell types

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.

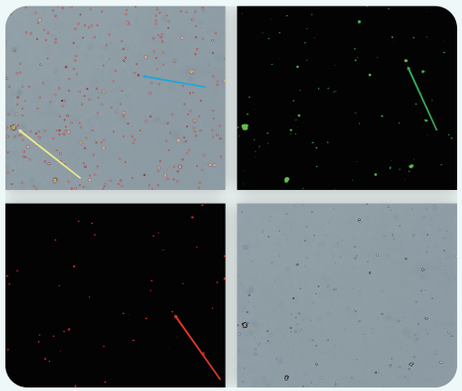


Well-trained AI algorithm

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.*



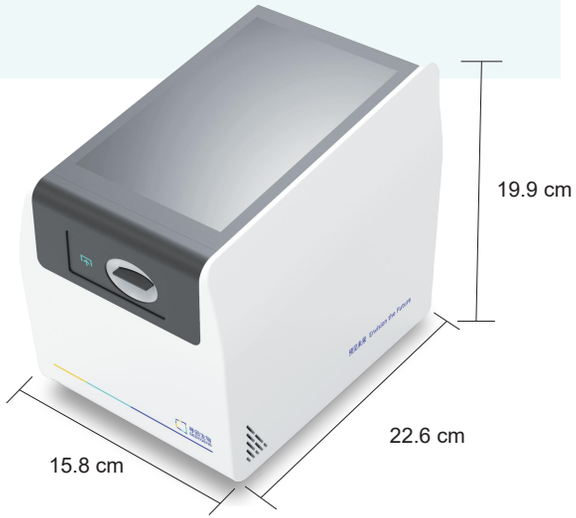
Cells stained by AO/PI. The live cells are shown in green fluorescence, and the dead cells are shown in red fluorescence. The blue arrow indicates the cells and the cell clumping is pointed by the yellow arrow

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

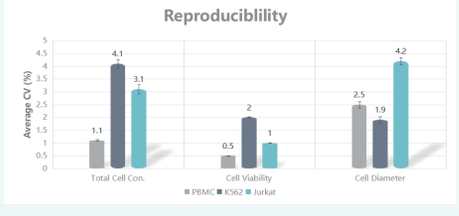
The Type-C power interface is compatible with power bank (25V 3.25A), extending continuous outdoor operation.



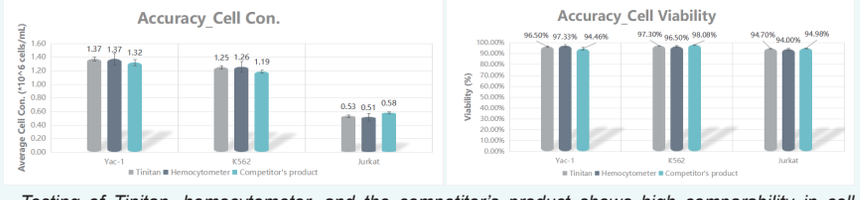
The compact size of Tinitan saves your lab bench space

Accurate and stable counting

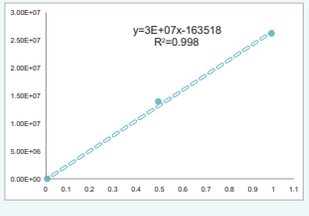
Validation studies using the SeekMate Tinitan™ FL and a hemocytometer have shown excellent accuracy and repeatability across various cell types, with CV values **≤ 5%** and a linear correlation coefficient exceeding **99%**.



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.



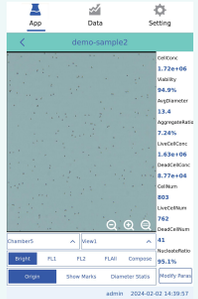
Dilution series of a K562 cell sample. The linear regression value suggests the high accuracy of Tinitan

Multiple savings design

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

10 μL sample loading to the chip

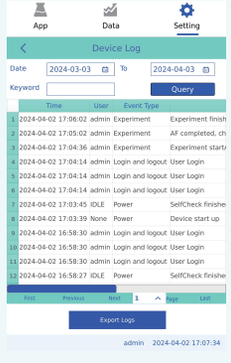
Setting parameters before detection

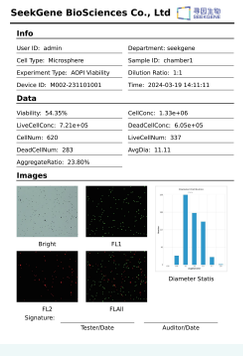


Result and image overview of YAC-1 cell line

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	$1x10^4$ - $3x10^7$ cells/mL
Optimum cell concentration range	$5x10^4$ - $1x10^7$ cells/mL
Cell size range	0.5 - 180 μm
Cell types	Cell lines, primary cells, PBMC, small cells, cell nuclei, spheroids, and other cell types
Count mode	Bright-field and Fluorescent
Sample volume	10 μL
Counting time	Trypan blue 25 s; AO/PI 40 s
Counting fields	3
Sample throughput	6
Fluorescence channels	Ex/Em: 470 nm/535 nm Ex/Em:470 nm/600 LP Ex/Em: 525 nm/600 LP
Camera	5 mega pixels
Focus method	Auto + Manual
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
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™ Fluoresence 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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