

RWD

# Automated Cell Counter

RWD automated cell counters realize accurate  
convenient and fast cell counting and fluorescence analysis

BF

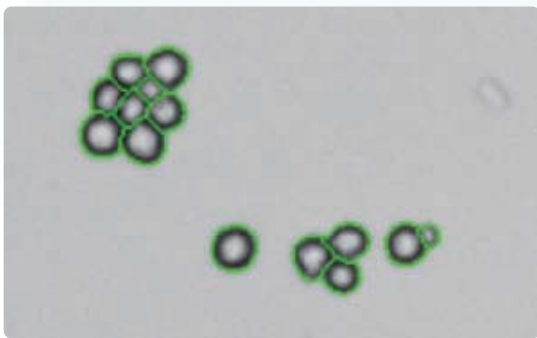


FL

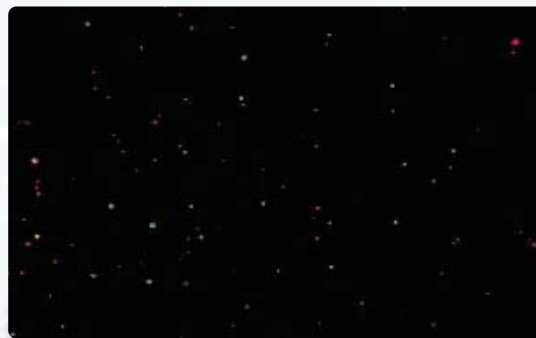


RWD Automated Cell Counter adopts Trypan Blue staining method, intelligent image recognition and advanced optical imaging technology to achieve accurate and automatic cell analysis. The algorithm can identify both live and dead cells within 9 seconds. Information such as cell counts, viability, diameter can be obtained by just one-click. With fluorescence cube, C100 can display images in BF and FL channels simultaneously and clearly present cell counts and cell morphology. It is an optimal device to analyze cell viability and transfection efficiency in immunology and vaccine development, cell therapy, tumor research, stem cell, metabolism research and others.

## Operation interface



Clustered cell recognition algorithm



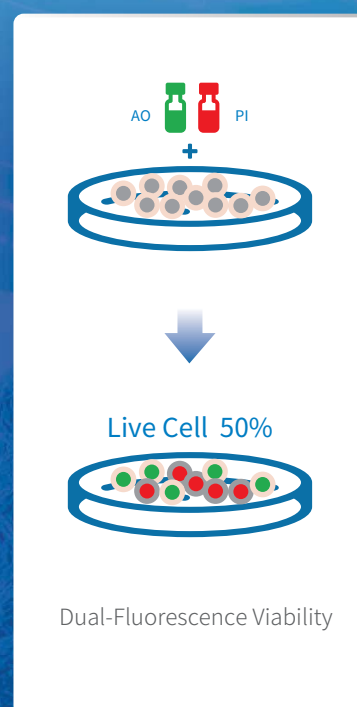
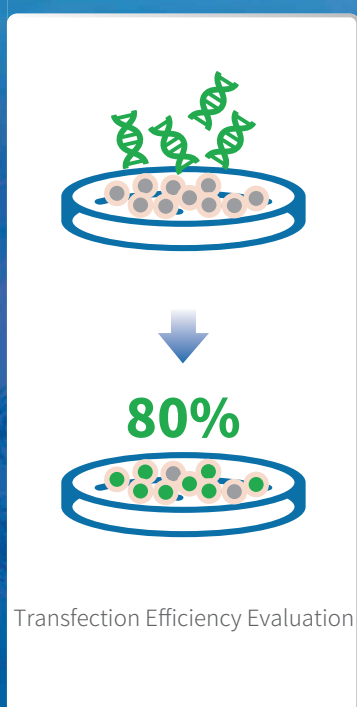
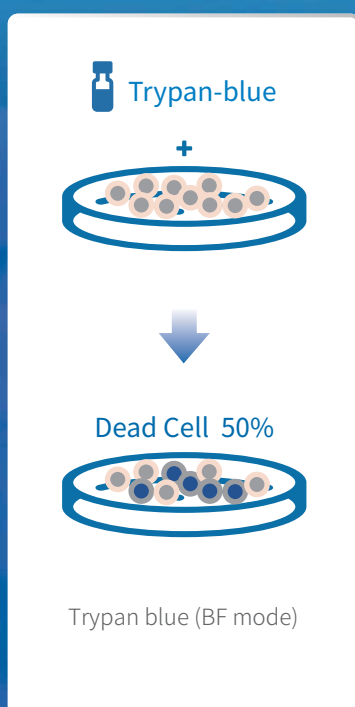
Clear fluorescence imaging



Pre-dilution calculator



User defined profile



## Application field

- Tumor Research — Cell line, pre-detection of apoptosis
- Immunological research — PBMCs, lymphocytes
- Cell Biology Research — Primary Cells
- Cell quality control — stem cells, CIK
- Cell expression level detection — fluorescent protein, transfection efficiency detection



Multiple results presentation methods

## Benefits

### Accurate

Whether in BF or FL counting, it can achieve fast and accurate counting under a clear field of vision, making the results more stable and reliable.

### Fast

In BF mode, the cell counter will automatically expose, focus and count after inserting the slide.

### Simple

Simple operation reduces working time and improves experiment efficiency.



## Product Characteristics

### High accuracy

- The self-developed algorithm can identify clustered cells.
- Intelligent cell marks contribute to precise cell recognition.
- RBC counting.
- Low autofluorescence and high-transmit filter enable clear imaging.

### Time-saving

- Autofocus and auto exposure
- Powerful computing capability ensures high efficiency

### Compact design

- Compact size fits into different placements.
- Removable modular FL cubes allow easy switches among various scenes.

### User-friendly

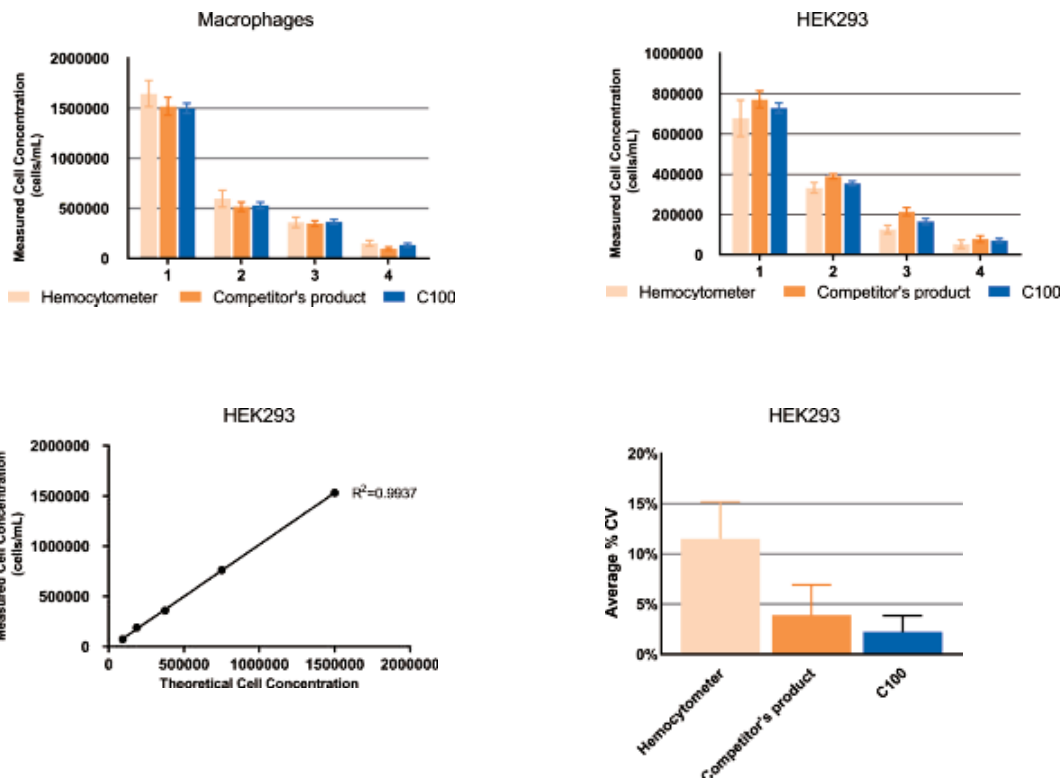
- User-friendly UI and built-in user guide interfaces ensure easy operation.
- Up to 1000 counting results can be stored. No need another device for extra storage.







## Accuracy



The results of HEK293 cell line and mouse primary macrophage count showed:

- C100 counter has a smaller standard deviation of multiple counts.
- The actual measured value and the theoretical value have a slight deviation in a great linear relationship.
- The CV value of manual counting can reach more than 10%, while the CV value of the C100 counting result is much lower than 5%.




## Accessories and consumables

DS-50 Disposable slide is composed of two independent counting chambers.

- One-piece cover plate, no cover glass required
- No manual cleaning required
- Disposable design to avoid biological safety hazards
- Independent and easy-to-use packaging, to ensure the repeatability of the experiment
- Balanced pressure design to ensure the uniformity of sample loading

Model	DS-50	
Chamber volume	10 $\mu$ L	
Number of chambers	2	
Dimensions of slide	75*25*1.7mm	
Dimensions of chamber	16.6*6*0.1mm	
Package	50pcs/box	

Detachable modular FL cube, optional dual fluorescence channels.

FL Cube	Excitation	Emission	General Dyes	
FL Cube-01	375/28nm	460/50nm	DAPI, Hoechst, BFP	
FL Cube-02	480/30nm	535/40nm	Acridine Orange(AO), Calcein-AM, Alexa fluor 488, SYBR Green, FITC, GFP	
FL Cube-03	540/25nm	620/60nm	Propidium Iodide(PI), DsRed, dTomato, RFP	

## Technical Parameters

Parameters	Description	
Model	C100-SE	C100
Optional fluorescence application	N/A	<p>○ (Ex : 375/28nm ; Em: 460/50nm)</p> <p>● (Ex : 480/30nm ; Em: 535/40nm)</p> <p>● (Ex : 540/25nm ; Em: 620/60nm)</p>
Amplification Factor	2.5X, 5.0 Megapixel	
Focus Method	Manual focusing & Autofocusing	
Counting Area	2.15 mm×1.62 mm	
Cell Type	Cell lines, stem cells, primary cells, pollens, beer yeast	
Cell Size Range	4-60 μm (Optimal: 7-60 μm)	
Cell Concentration Range	10 <sup>4</sup> -10 <sup>7</sup> cells/mL	
Cell counting Time	Less than 9s	
Historical Data Storage	1000 counting reports and images at most	
Languages	Chinese and English	
Dimensions	212 mm(W)* 264 mm(H)* 165 mm (D)	
Weight	~3.0kg	~3.2 kg

## Order Information

Cat No.	Product Description
C100-SE	Automated Cell Counter (BF)
C100	Automated Cell Counter (BF + FL)
FL Cube-01	○ (Ex : 375/28nm ; Em: 460/50nm)
FL Cube-02	● (Ex : 480/30nm ; Em: 535/40nm)
FL Cube-03	● (Ex : 540/25nm ; Em: 620/60nm )
DS-50	Disposable Slide (50 pcs/box)

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