

Count with confidence, Count with EVE HT FL!



# EVE<sup>TM</sup> HT FL

## High-throughput Fluorescence Cell Counter

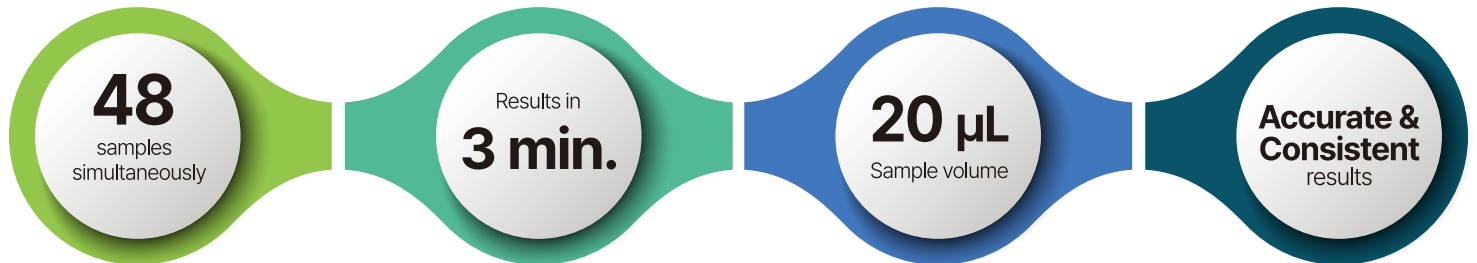
- Primary Cells
- PBMCs
- Stem Cells
- Cell Lines

## Introduction

EVE™ HT FL is a high-throughput automated fluorescence cell counter equipped with **bright field** and **dual fluorescence channels (AO/DAPI)**. In just **3 minutes**, up to **48 samples** can be counted and analyzed.

EVE™ HT FL delivers precise and accurate results, making it the best option for both cell lines and primary cell counting in a variety of applications.

## Features



## Level Up Your Productivity

In just **3 minutes**, up to **48 samples** can be counted simultaneously.

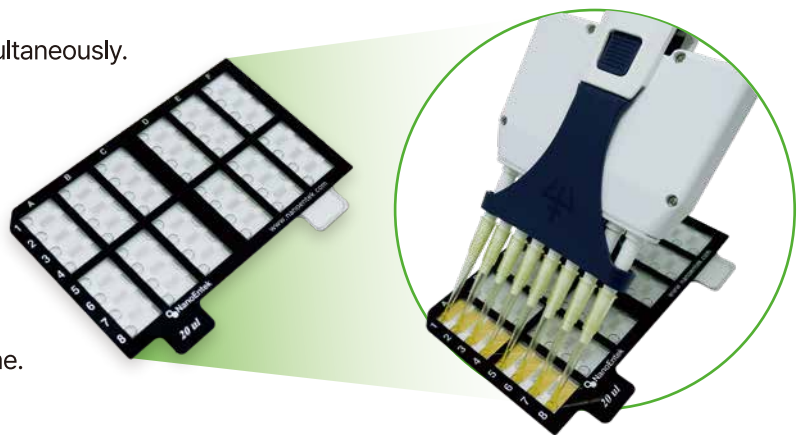
Don't wait! Count your samples in 3 minutes.

Leading to substantial time saving by eliminating the need for frequent reloading and waiting periods.

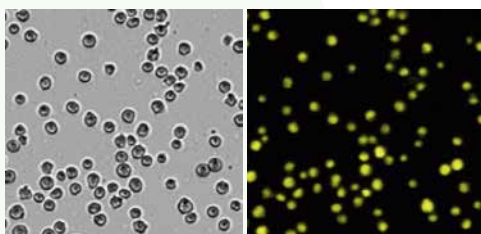
## Small Sample Volume

EVE™ HT FL only needs **20 µL** of your valuable samples.

Save your cells for more measurements or better outcome.

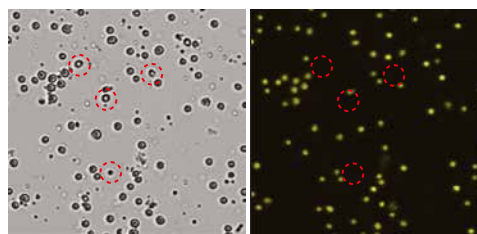


## Dual fluorescence for accurate measurements of primary cells or PBMCs



Bright field Image

AO stained cells



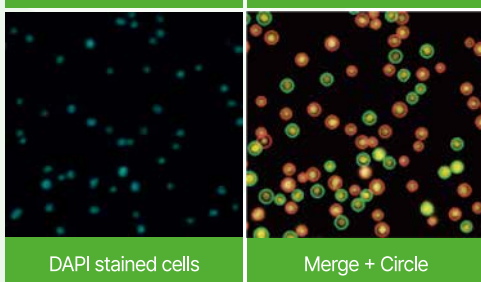
Bright field Image

Total cells  
(AO stained cells)

### Counting PBMCs ONLY!

PBMCs are often mixed with RBCs or platelets. Use EVE HT FL to count only nucleated cells such as PBMCs.

Fluorescence based counting is more accurate than traditional Trypan Blue based counting.



DAPI stained cells

Merge + Circle

## Diverse Cell Counting Applications

Primary Cells

PBMCs

Cell Lines

Stem Cells

Hepatocytes

Leukocytes

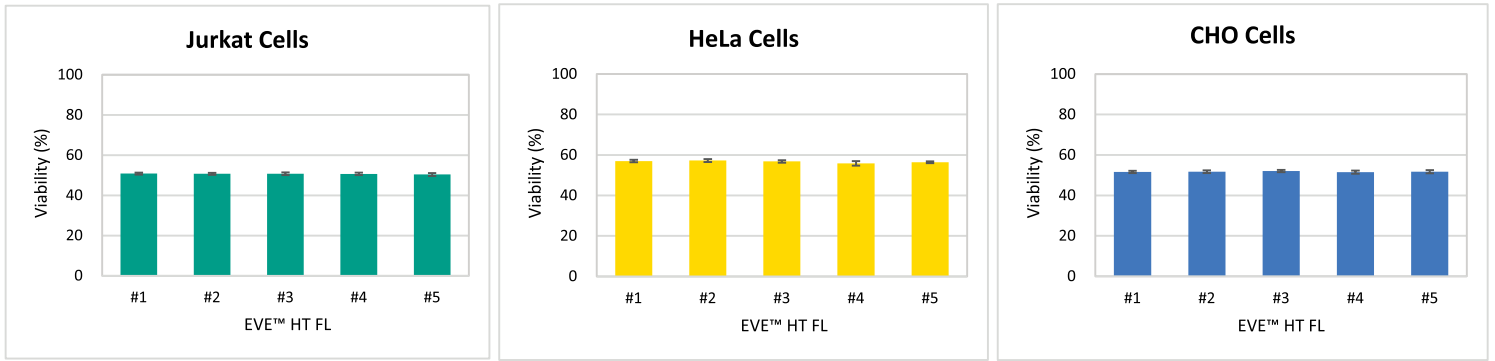
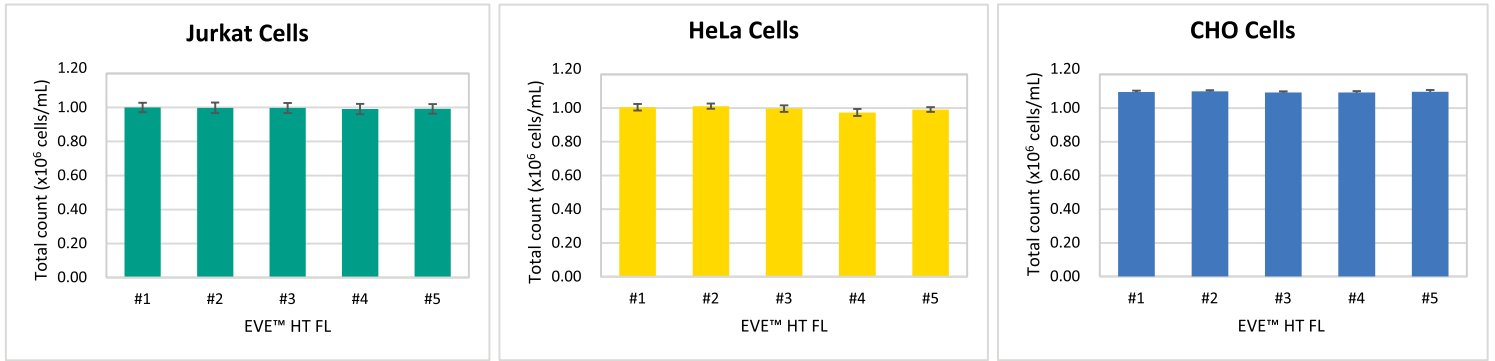
Splenocytes

Adipocytes

# Accurate and Precise Results

## Instrument-to-instrument Variability with Cell Lines

5 EVE™ HT FL instruments were put to the test using three different cell line samples (Jurkat, HeLa, and CHO) to compare their differences. The results below show very low instrument-to-instrument variability.

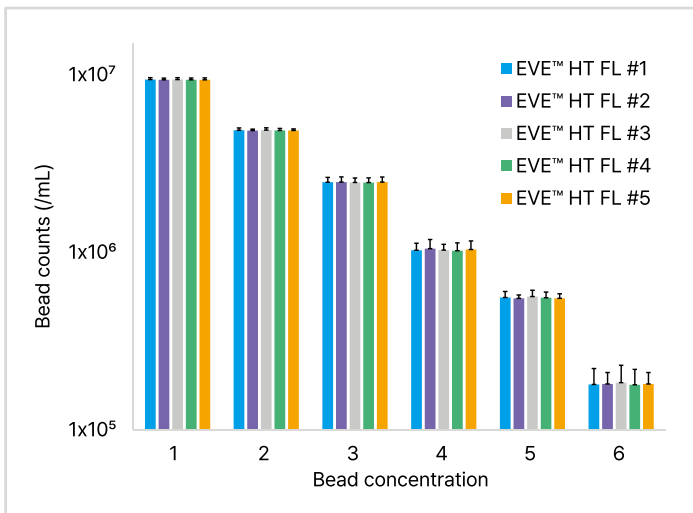


Jurkat	Total count (CV)	Viability (CV)	HeLa	Total count (CV)	Viability (CV)	CHO	Total count (CV)	Viability (CV)
Instrument to instrument	0.44%	0.21%	Instrument to instrument	1.14%	0.91%	Instrument to instrument	0.24%	0.37%
Plate to plate	2.77%	0.99%	Plate to plate	1.45%	0.85%	Plate to plate	0.58%	1.07%
Whole result	5.70%	4.38%	Whole result	5.29%	3.73%	Whole result	5.33%	4.28%

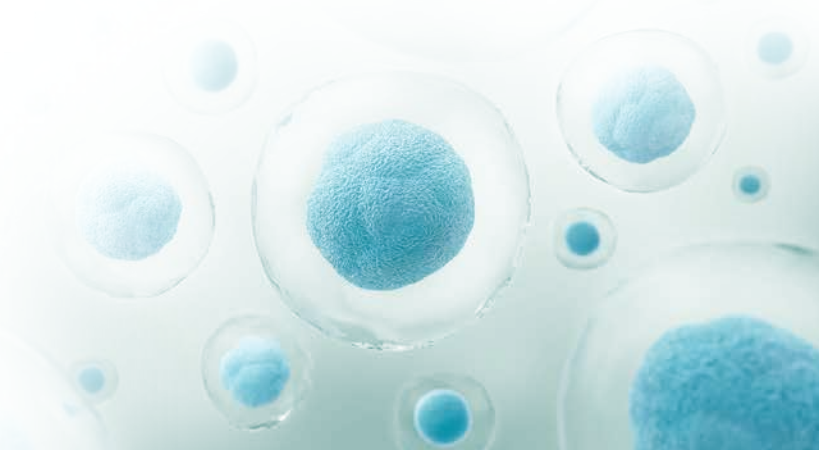
\*Whole result: CV value was calculated by combining a total of 400 results measured 16 times each on 5 instruments and 5 plates.

## Instrument-to-instrument Variability with Beads

5 EVE™ HT FL were used to measure fluorescent reference beads (for AO channel) at 6 different concentrations. The results below show very little instrument-to-instrument variability.

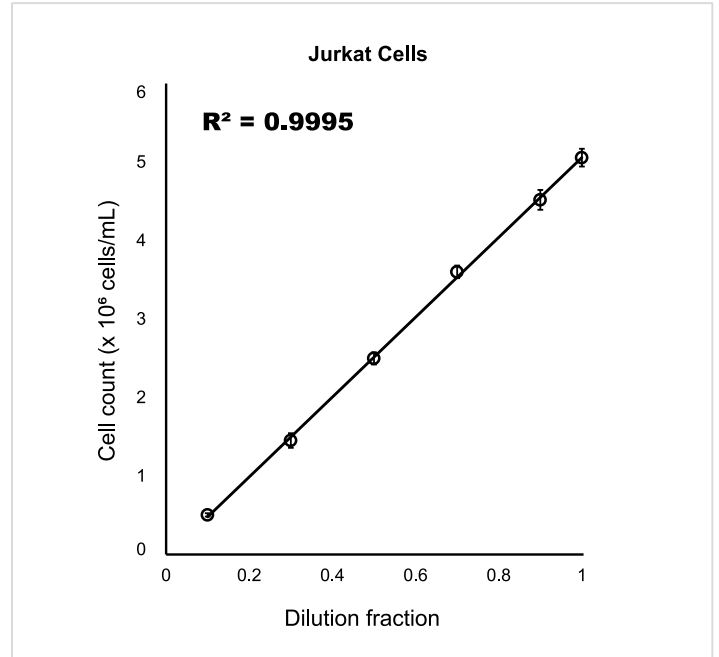
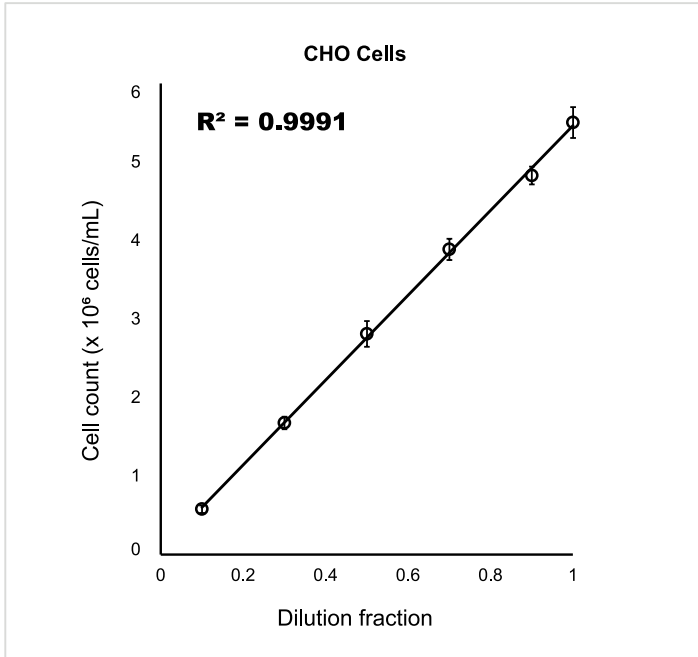


	Bead 1	Bead 2	Bead 3	Bead 4	Bead 5	Bead 6
Instrument to instrument (CV)	0.17 %	0.28 %	0.28 %	1.02 %	0.98 %	1.04 %



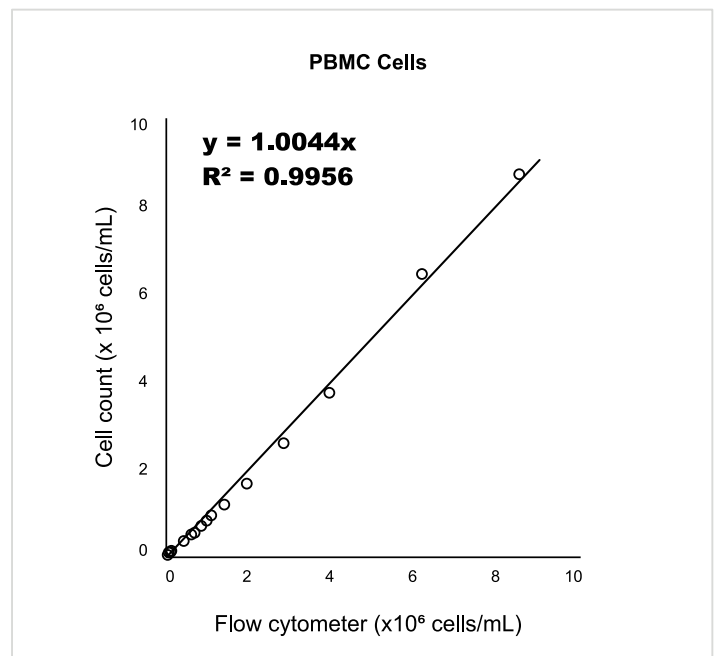
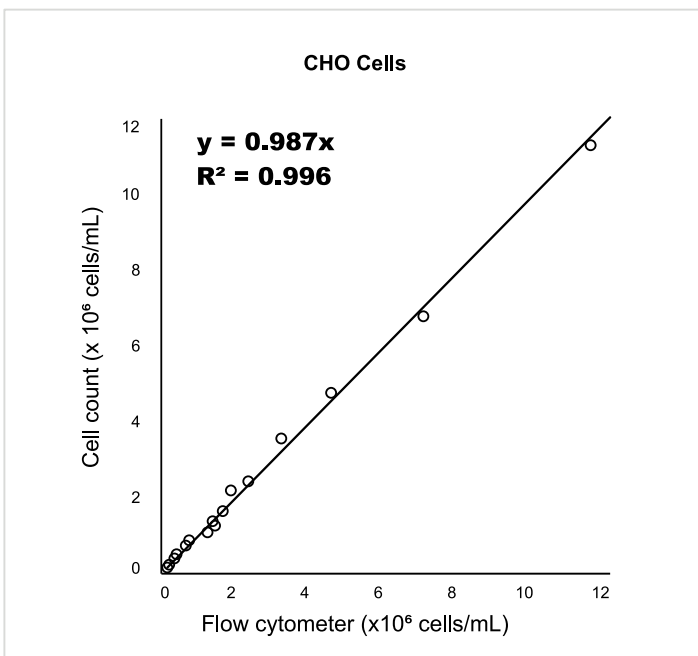
## Excellent Linearity Across Wide Range

Following ISO standard for cell counting, we evaluated linearity of EVE™ HT FL using 2 cell lines (CHO cells and Jurkat cells). The following results demonstrate outstanding linearity.



## High Correlation Between EVE™ HT FL and a Flow Cytometer

Cell samples were measured using EVE™ HT FL and a flow cytometer. For both CHO cells and PBMCs, total cell counts measured by EVE™ HT FL were highly correlated with those measured by a flow cytometer.



# 21 CFR Part 11 Compliance READY

EVE™ HT FL is ready for 21 CFR part 11 compliance for cGMP facilities.

Electronic Records

Audit Trails

Electronic Signatures

User Management

Audit Trail

Electronic Signatures

User Name	Access Level	Delete	Lock
admin	Admin	X	
user1	User	X	
test1	User	X	
super1	Supervisor	X	

User Management

## Data Analysis Report

Results can be easily saved as a PDF report and your data can be easily shared with anyone. Also, more detailed results and raw images can be exported in CSV and JPG files to help you run more extensive data analysis or prepare presentations.

EVE™ HTFL Test report

Signature

Export user: admin\_nano

Export date: 2023-06-14 10:47:45

Project name	230803 method 2nd CHD
Project type	Cell
Date & time	2023/06/14 14:35:29
Path	2023_0803_143529
Solution Lot No.	EVEHTF1
Solution Type	AGADPH
Solution Exp. Date	2024 06 15
User Name	admin_authenticator
Accuracy mode	CR
Real cell size	CRF

All Graph

Total Count Graph

Live Count Graph

Dead Count Graph

Viability

Circle On

Circle Off

## Customizable Setting for Cell Counting

Users can customize image analysis parameters which can be saved and easily imported for next measurements. This feature allows users to find best sets of parameters that help identify only those cells of their interest and minimize the effects of non-cell debris or unwanted subtypes of cells.

Channel  BRIGHT  AO  DAPI

Tolerance 25

Smooth level 1

Cell intensity level 25 ~ 255

Size range (µm) 3 ~ 50

Set parameters for each channel



Scan me

## Ordering Information

No.	Cat. No	Product	Contents
1	EVE HT FL	High-throughput fluorescence cell counter	Main device 1 ea Desktop & monitor 1 set Multi pipette 1 ea
2	EVFL-020	EVE HT FL Counting kit	960 tests / kit Counting plates (48 channels × 20 ea) Mixing well plates (96 wells × 10 ea) Reservoirs (5 pcs × 4 packs)
3	EVAD-960	AO/DAPI Staining solution	Acridine orange (AO) & 4',6'-diamidino-2-phenylindole (DAPI) stain 20 mL × 2 bottles

## Specifications

Analysis Time	3 ~ 6 minutes for 48 samples	Operation System	Windows 10
Measuring Range	Detectable range: $1 \times 10^4 \sim 2 \times 10^7$ cells/mL Optimal range: $1 \times 10^5 \sim 1 \times 10^7$ cells/mL	Power	100 ~ 240V, 50/60Hz
Cell Size Range	Detectable size: 5 ~ 85 $\mu$ m Optimal size: 5 ~ 80 $\mu$ m	Dimensions	586 × 461 × 458 mm (W×D×H)
Channel	Dual fluorescence channels (AO & DAPI)	Weight	58 kg
Loading Sample Volume	20 $\mu$ L per channel	Staining Solution	AO/DAPI mixed solution (EVAD-960)
		21 CFR Part 11 Compliance	Available (Optional)

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