

# CellDrop™

Automated Cell Counter

## Count Cells Without Slides

- | **Sustainable** - Reduce Costs and Plastic Use
- | **Trusted** - Used by Thousands of Researchers Worldwide
- | **Optimized** - Widest Range of Sample Types
- | **Flexible** - DirectPipette™ (No Slides), Reusable or Plastic Slides



# Why Do Scientists Choose CellDrop™?

## Unmatched Cell Counting Performance

Fast, Accurate and Easy to Use - Counts & Viability in Under 10 Seconds

## Improve Lab Sustainability and Reduce Costs

Unique DirectPipette™ Technology Removes the Requirement for Slides

## Measurement Mode Flexibility

DirectPipette™, Reusable or Single-Use Slide Modes

## Dual Fluorescence and Brightfield Imaging

Increased Accuracy for Cultured Cells, Primary Cells, Nuclei and More



## DirectPipette™ Technology

CellDrop's patented design replaces hemocytometers and plastic slides with an innovative wipe clean, variable height chamber.

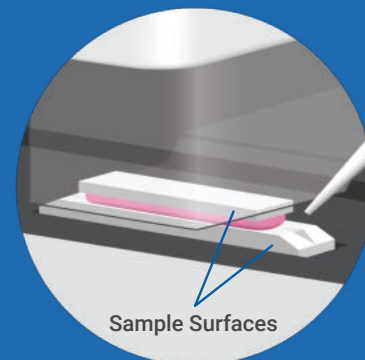
- Fast, reliable workflow
- Use as little as 2.5 µL of sample
- Variable chamber height enables the widest cell density range



Load Cell Suspension into Sample Chamber



Count, Analyze and Wipe Clean in Seconds



A sample chamber is formed between **two permanent, parallel, optical grade sapphire surfaces**. The sample can be loaded from either side and is held in place by surface tension.

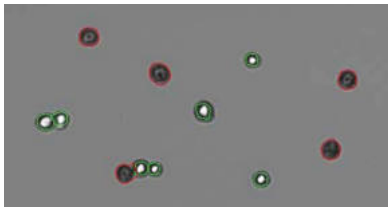
## Slide Mode

- **Single-Use Plastic Slides:** for hazardous samples or workflows that require sample containment
- **Reusable Slides:** environmentally-friendly alternative to plastic slides when sample containment is required

# Models and Applications

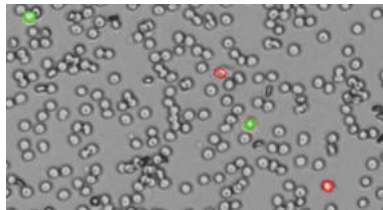


	Fluorescence & Brightfield	Brightfield Only
Standard Magnification <i>4X Objective 4 - 400 <math>\mu</math>m Cells</i>	<b>CellDrop FLi</b> Tissue Culture    GFP Primary Cells    Fixed Samples Isolated Nuclei    Plant Cells Hepatocytes    Insect Cells Organoids	<b>CellDrop BF</b> Tissue Culture Low Debris
High Magnification <i>10X Objective 2 - 20 <math>\mu</math>m Cells</i>	<b>CellDrop FLxi</b> Stem Cells    Apoptosis Yeast Viability    Yeast Vitality Other Small Cells	<b>CellDrop BFx</b> Yeast Total Count Low Debris Other Small Cells



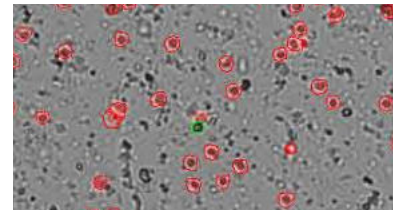
## Tissue Culture

Viability staining of tissue culture with Trypan Blue or Erythrosin B.



## Primary Cells

Easily differentiate PBMCs from non-nucleated RBCs and debris with AO/PI.



## Nuclei

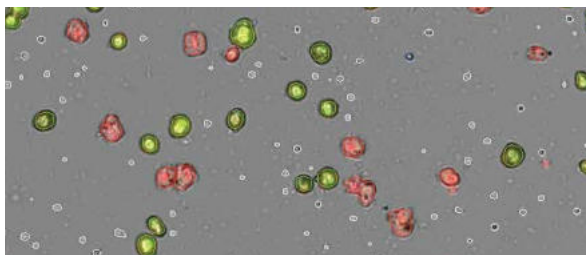
Count isolated nuclei and intact cells from either fresh, frozen or fixed samples.

# Harnessing Machine Learning for Complex Samples

Counting complex sample types such as hepatocytes and organoids has long been challenging for traditional counting algorithms due to their internal structures, irregular shapes and sizes, debris, and more. DeNovix scientists took a revolutionary approach to this challenge, using machine learning to develop robust models for reliably automating these counts.

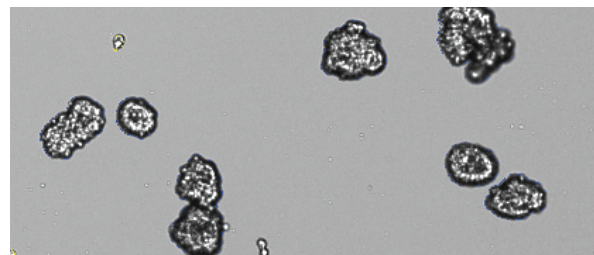
## Hepatocytes

In addition to live / dead hepatocyte densities and viability, the Hepatocyte application also reports the number of lymphocytes, free nuclei, and debris objects in a sample.



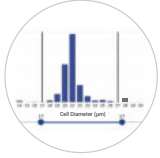
## Organoids

The application is trained to provide a count and size distribution of organoids. Dissociated objects are also reported, allowing for quick and simple quality control.

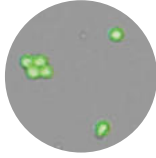


# EasyApps™ Software: Cell Counting Made Easy

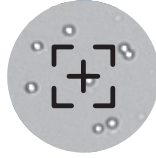
DeNovix software is designed by life scientists, for life scientists. Optimized apps make CellDrop simple to use and ensure that cell counts are standardized and reproducible across all members of the lab.



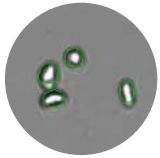
Cell Size Gating



Advanced Declustering



Autofocus



Irregular Cell Detection



Flexible Data Export



GxP Compliance Ready



## Specifications

<b>Dynamic Range</b>	7 x 10 <sup>2</sup> - 2.5 x 10 <sup>7</sup> cells / mL (FLi & BF) 4.3 x 10 <sup>3</sup> - 2.1 x 10 <sup>8</sup> cells / mL (FLxi & BFx)	<b>Connectivity</b>	Wi-Fi, Ethernet, HDMI, 3 USB Ports
<b>Chamber Height</b>	50, 100 or 400 µm	<b>Footprint (LxWxH)</b>	37 x 21 x 18 cm
<b>Sample Volume</b>	5, 10 or 40 µL	<b>Weight</b>	4.4 kg
<b>Measurement Speed</b>	3 Seconds - Brightfield 8.5 Seconds - Dual Fluorescence	<b>Certifications</b>	UL/CSA, CE, FCC, Japan CAB
<b>Brightfield Illumination</b>	LED 530 nm	<b>Warranty</b>	2 Years
<b>Fluorescence Illumination</b>	LED 470 nm	<b>Patents</b>	denovix.com/patents
<b>Emission Filters</b>	525 nm +/- 25 nm 645 nm +/- 37 nm	<b>Colors</b>	



View All Specifications



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