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OXFORD OPTRONIX

GELCOUNT™ 2

Taking the strain out of colony, spheroid and organoid counting

- Second-generation imaging and analysis platform for 3D colonies, spheroids and organoids
- Substantial throughput and objectivity gains versus manual microscope processing
- Generate object counts AND diameter statistics per well or dish
- High-resolution whole well or whole dish view, no z-stacking
- Direct exportation of output data to Excel®
- Unlimited software installations for image processing on other workstations

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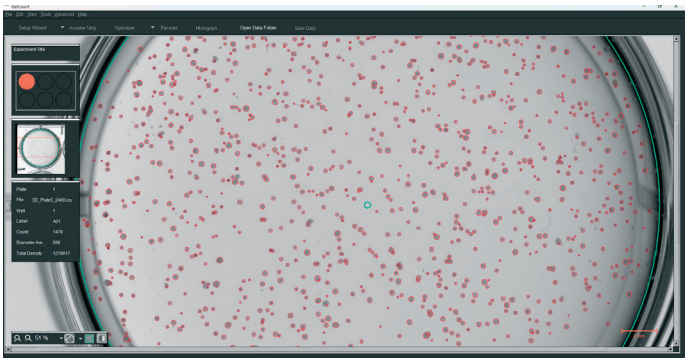
Rationale

The colony or spheroid formation assay is universally recognized as the gold standard method for measuring the effects of radiation, chemotherapeutic drugs and other agents on cancer cell viability. Meanwhile, the growth of multi-cellular 3-dimensional organoids, derived from a spectrum of primary cell types has revolutionized the study of disease and therapeutic responses *in vitro*. However, manual counting and sizing of the resulting colonies, spheroids or organoids, typically under a microscope, is a laborious and rate-limiting task in which consistency and objectivity are difficult to achieve.

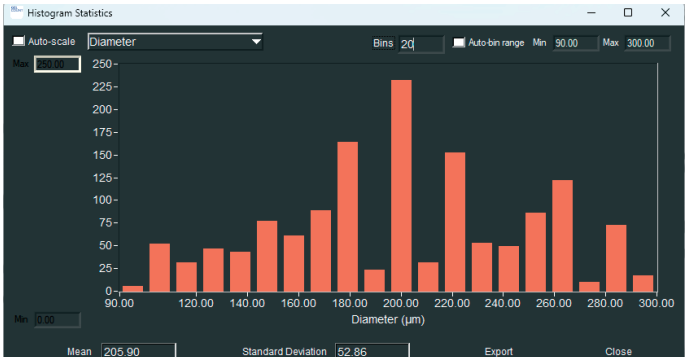
The industry benchmark

Introducing GelCount™ 2, an integrated, PC software-operated imager and analysis platform that automates the detection, counting and analysis of 3D mammalian cell colonies, organoids or spheroids in multi-well plates and Petri dishes. With over 500 scientific citations to its name the original GelCount™ has become a benchmark for biologists around the globe. GelCount™ 2 introduces a revised design, faster processing, and a more intuitive user experience.



The diameter advantage

Not only does the GelCount generate a numerical count of colonies, spheroids or organoids, crucially it also automatically yields object size information (diameter in microns), providing hitherto unavailable insight relating to cellular growth dynamics.



High throughput imaging of 3D cultures

Adherent colonies or non-adherent colonies, spheroids, and organoids in 3D media or suspension culture can be imaged in a single pass without z-stacking. Typical imaging and processing times of less than 10 minutes for four 6-well plates at typical resolution, or less than 25 minutes for four 96-well plates at maximum resolution provides substantial throughput gains compared to manual microscope processing.

Objective, unbiased output

Inherent 'machine' objectivity and consistency eliminates human error due to subjective object interpretation, bias or plain fatigue – a particularly acute problem when manually processing spheroids and organoids under a microscope.

Workflow optimization

The software can be installed on unlimited other workstations. Images generated by the GelCount can be stored, transferred to and processed ‘offline’ at the user’s convenience without tying up the imager for other users. Meanwhile colony, spheroid or organoid counts, diameter statistics and other parameters are exported directly to Excel®.

Warranty

Our comprehensive 2-year product warranty covers defects in material or in workmanship with optional extended warranty and preventative servicing packages available.

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