

APPLICATION NOTE

Confluence and growth curve generation on the CloneSelect Imager

Background

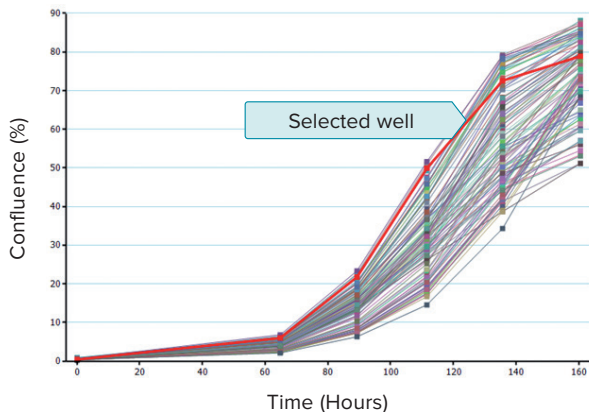
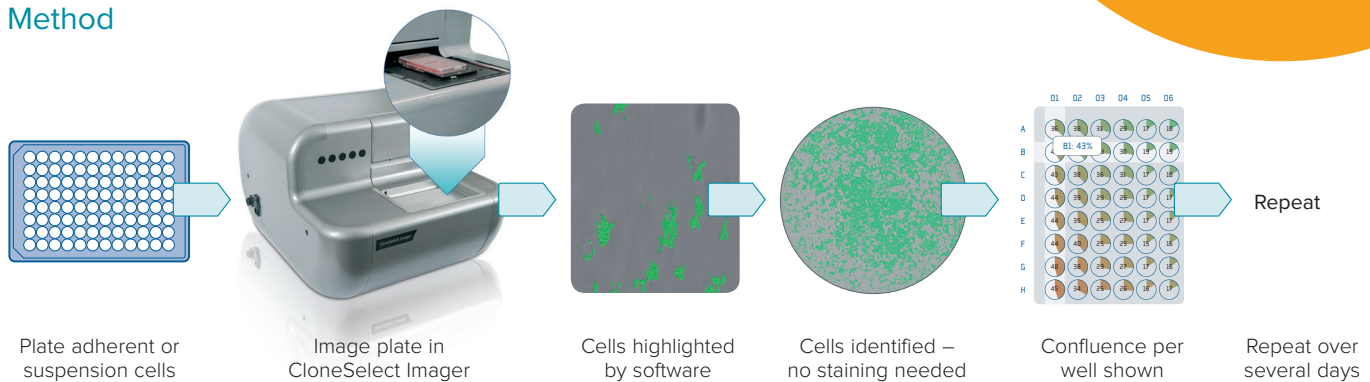
The ability to monitor cell proliferation has become increasingly important, particularly with the widespread use of *in vitro* cell lines as model systems. Proliferation rates can be used to show the effect of a potential therapeutic on cell growth and to characterize a specific cell line.

This application note demonstrates how the CloneSelect™ Imager replaces subjective, time-consuming microscopic analysis with straightforward, objective and non-invasive process to measure cell confluence at a number of time points.

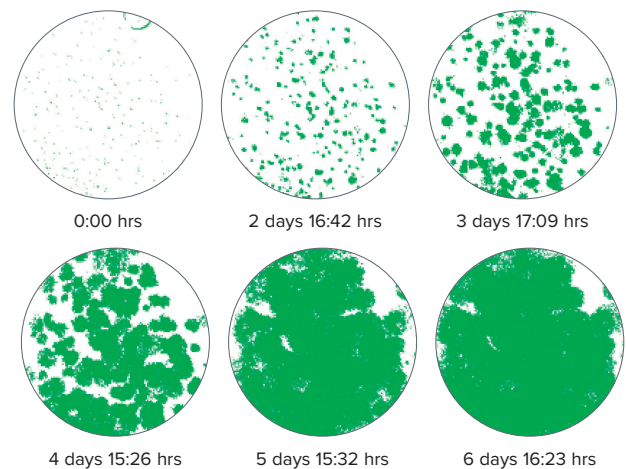
Benefits

- Image in a label-free manner using white light and/or fluorescence
- Scan, determine, and record cell confluence and cell number of the entire well for every well, objectively, over time
- Rapidly screens one 96-well plate within 90 seconds

Method



Growth rate. % confluence versus time for each well in a 96-well plate.



Thumbnails for each time point. Integral software creates overlay (green) to indicate confluence values.

Objective, quantitative assessment of cell growth

The CloneSelect Imager utilizes non-invasive, white light imaging to enable rapid, quantitative measurement of cell confluence and generation of growth curves well by well.

Fast results:

- Replace time-consuming manual inspection
- Make confident, image-driven decisions
- Obtain consistent results in under 90 seconds per 96-well plate

For applications including:

- Rapid confluence measurement
- Growth curve generation
- Cell number estimation
- Proof of clonality
- Colony forming assays
- Cell migration assays

Key parameters:

- Accepts multi-plate formats from single well to 384-well
- 4x objective lens
- Resolution to 1.8 μm
- Integrated barcode reader
- Optional fluorescence imaging capability

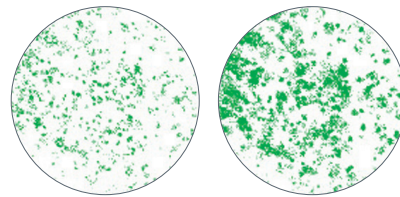


Objective analysis

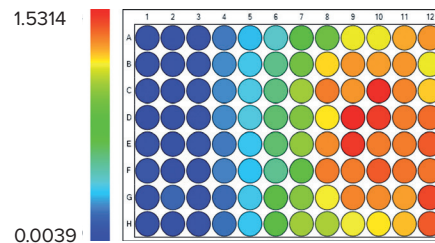


Productivity easily increased

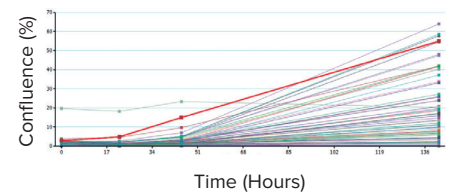
Compatible with a range of robotic systems



Simple overlay reveals cell confluence



Heat maps facilitate analysis



Growth rates for every well viewed at every time point

Rapid image generation and clear data analysis

Contact Us

Phone: [+1-800-635-5577](tel:+18006355577)
Web: www.moleculardevices.com
Email: info@moldev.com

Check our website for a current listing of worldwide distributors.