



Cell proliferation is a measurement of cell growth and defined as the balance between cell divisions and cell loss through cell death. Cell proliferation assays are widely applied in biological sciences to understand the growth pattern of cultured cells and to assess the in vitro safety and efficacy of drugs over time.

However, most methods are end-point assays and often assess cell proliferation indirectly. With HoloMonitor® App Suite, cell proliferation is determined, both by kinetic cell counting and by confluence assessment.

#### **DESCRIPTION**

HoloMonitor® Kinetic Cell Proliferation Assay is designed for automated and detailed proliferation analysis of adherent cells. At each time point individual cells are automatically identified and counted by the software. Cell confluence, i.e. percentage of the surface area covered by cells, is assessed simultaneously. Cell proliferation is thus directly and continuously determined.



# **Output measures**

Cell count over time (cells/cm² over time)

Confluence over time (% cell covered area over time)

### HOLOMONITOR APP SUITE

HoloMonitor® App Suite is a completely new proprietary software for analysis of images and data generated by the HoloMonitor® M4 base unit. HoloMonitor® App Suite focuses on biological applications and enables researchers within all levels of cell biology to easily perform live-cell studies on various cellular events.

### KEY REFERENCE

Janicke J, Kårsnäs A, Egelberg P, and Alm K. Label-free high temporal resolution assessment of cell proliferation using digital holographic microscopy. Cytometry A 2017 May;91(5):460-469

## FURTHER INFORMATION

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