

HoloMonitor® M4

Understanding Cell Movements

HoloMonitor® M4 expands your cell studies beyond visual images and time-lapse movies. You will easily achieve quantitative data telling you exactly what happens to your cells in the incubator, and how the cells respond to different treatment strategies and conditions.

COVERS ALL ASPECTS OF CELL MOVEMENTS

Understanding of cell movements is essential in many aspects of cancer research. Especially, when it comes to exploring the pathways healthy cells take to transform into dangerous tumor diseases (malignancy). As well, in the search for new therapeutic strategies employing human's own defense mechanisms – the immune system.

Recent development has turned HoloMonitor into a fantastic tool to explore and map cell movements, both for single-cell studies and in population-based experiments.

- ✓ Study the motility of a cell population. Results of average cell speed and mean cell relocation distance are automatically presented.
- ✓ Easily set up and study gap closure, cell front velocity, and other features using the semi-automated HoloMonitor Wound Healing Assay.
- ✓ Analyze single cells with Track Cells module, which identifies key cells that behave differently than the average population.
- ✓ Distinguish between random movement (motility), and directional movement (migration).

” Both HoloMonitor Track Cell module and the Wound Healing Assay were found to be well-correlated with established standards, yielded reproducible results, and at the same time offered distinct advantages. ”

Zhang and R L Judson, Cytometry Part A (2018)

RELATED PUBLICATIONS

Evaluation of Holographic Imaging Cytometer HoloMonitor M4 Motility Applications

Yuntian Zhang, Robert L. Judson, Cytometry Part A

Single Cell Analysis of Proliferation and Movement of Cancer and normal-like cells on nanowire array substrates

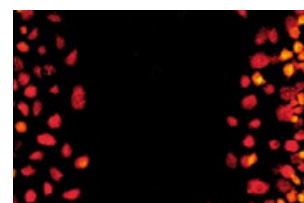
Zhen Li, Sofia Kamlund et al, Journal of Materials Chemistry B

Moving into a new Dimension: Tracking Migrating Cells with Digital Holographic Cytometry in 3 D

Anette Gjörlöf Wingren, Cytometry Part A



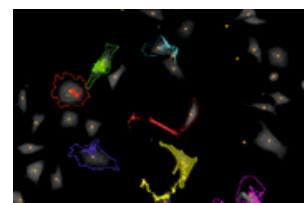
HoloMonitor M4 operating in the incubator for label free time-lapse imaging.



HoloMonitor Wound Healing Assay with semi-automatic gap closure analysis.



App Suite software auto matically provides population based motility data.



Single cell analysis using the Track Cells module.

FURTHER INFORMATION

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