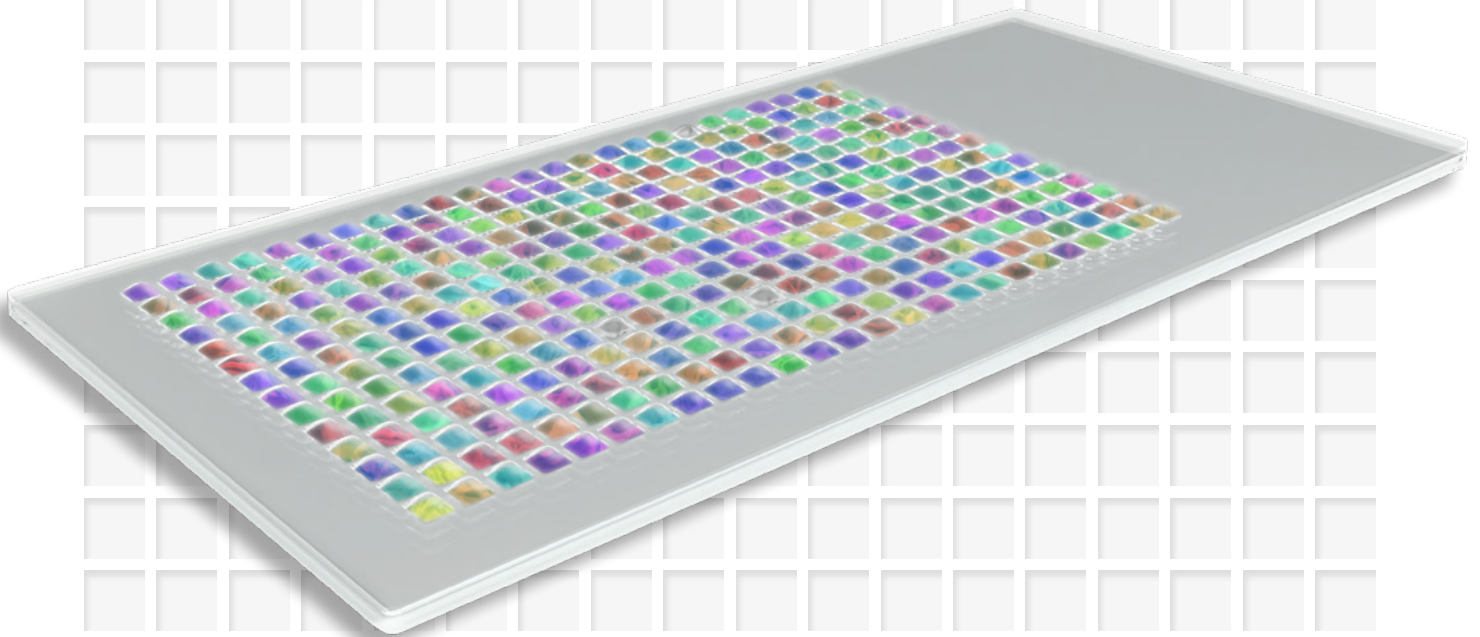
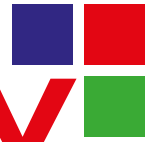


AQUARRAY



DROPLET MICROARRAY
A MINIATURIZED ARRAY PLATFORM
FOR CELL CULTURE

DROPLET MICROARRAY

A MINIATURIZED ARRAY PLATFORM FOR CELL CULTURE

Comparative KI67 and Vimentin immunofluorescence staining 24h, 48h and 72h after seeding on Droplet Microarray or conventional cell culture on poly-lysine coated coverslips using the following cell lines:

PC3	human prostate carcinoma	page 3
HCT116	human colorectal adenocarcinoma	page 4
MCF-7	invasive breast ductal carcinoma	page 5
SK-MEL-28	human malignant melanoma	page 6
SKOV-3	human ovarian carcinoma	page 7
Hela	human cervical carcinoma	page 8
MDA-MB-231	human ductual breast carcinoma	page 9
A549	human alveolar basal epithelial adenocarcinoma	page 10
HT-29	human colorectal adenocarcinoma	page 11

PROTOCOL

Droplet Microarray: 100 cells/spot were seeded in 150 nL DMEM +10% FCS on Droplet Microarrays with 672 spots (Aquarray, cat nr. G-np-102) using the non-contact dispenser I-DOT One. Cells were incubated in humidity chambers at 37°C, 5% CO₂ for 24, 48 and 72 hrs.

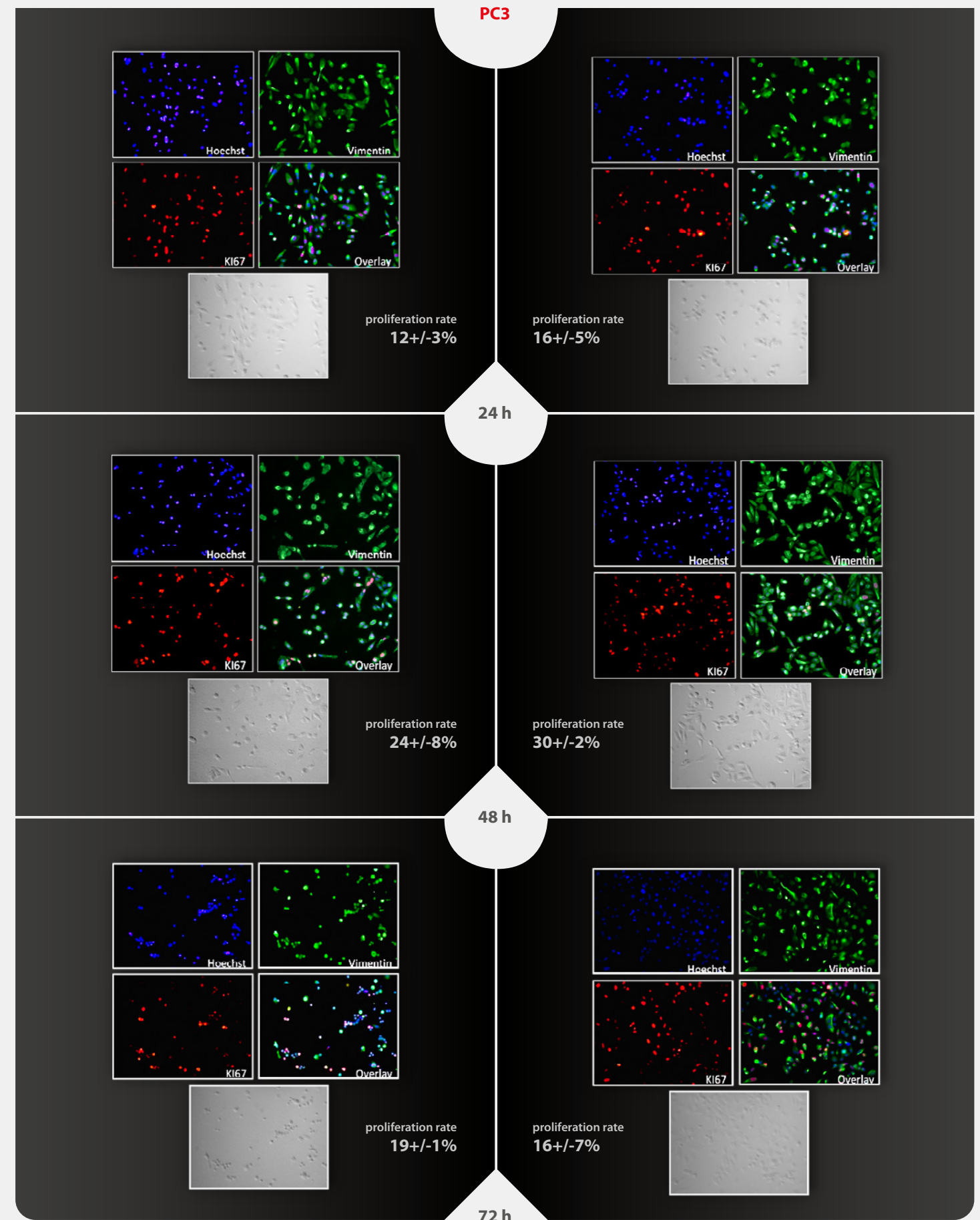
Coverslip: Poly-lysine solution (Sigma P8920, 0.1%) was diluted in 1:10 in sterile water. 0.5 ml of diluted solution was added onto each cover slip and incubated at RT for 3-5 minutes. After removal lysine solution the cover slips were washed with 2ml of PBS. Staining of cells on Droplet Microarray (DMA) according to the protocol "Immunofluorescence staining of DMA with KI67 and Vimentin" (Link: <https://www.aquarray.com/protocols>). Staining of coverslips was performed accordingly.

APPLICATION OF HOECHST, VIMENTIN AND KI67 STAINING

- Hoechst staining is used as nuclear marker of living or fixed cells and tissues
- Vimentin is used as marker of mesenchymal derived cells or cells undergoing an epithelial-to-mesenchymal transition (EMT) during both normal development and metastasis
- KI67 is a nuclear marker for cell proliferation and is widely used in routine pathological investigations and is an established prognostic and predictive indicator for the assessment of biopsies from tumor patients

DROPLET MICROARRAY

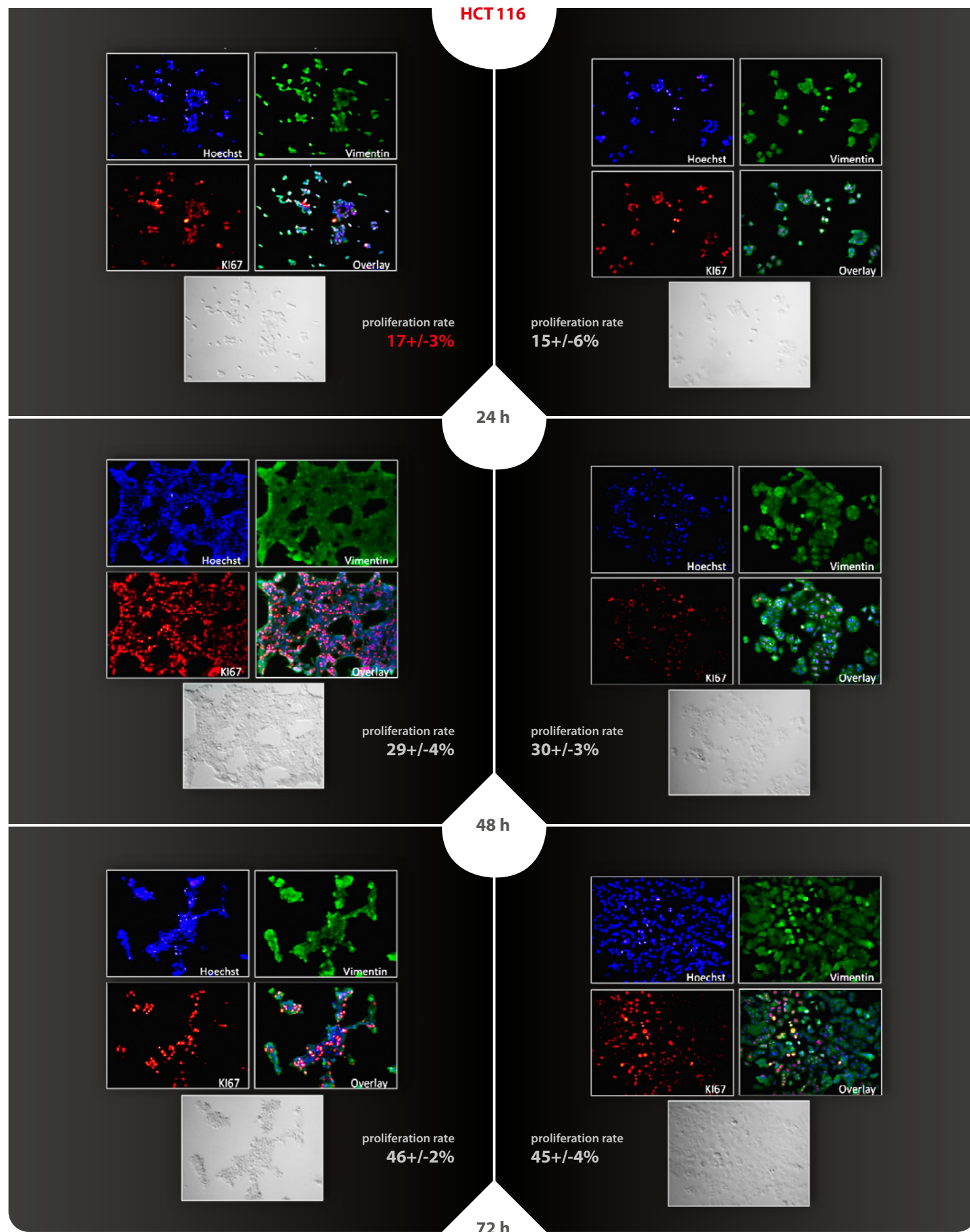
POLY-LYSINE COATED COVERSGLIPS



Proliferation rate is calculated from 5 spots on DMA or 5 regions on a coverslip.

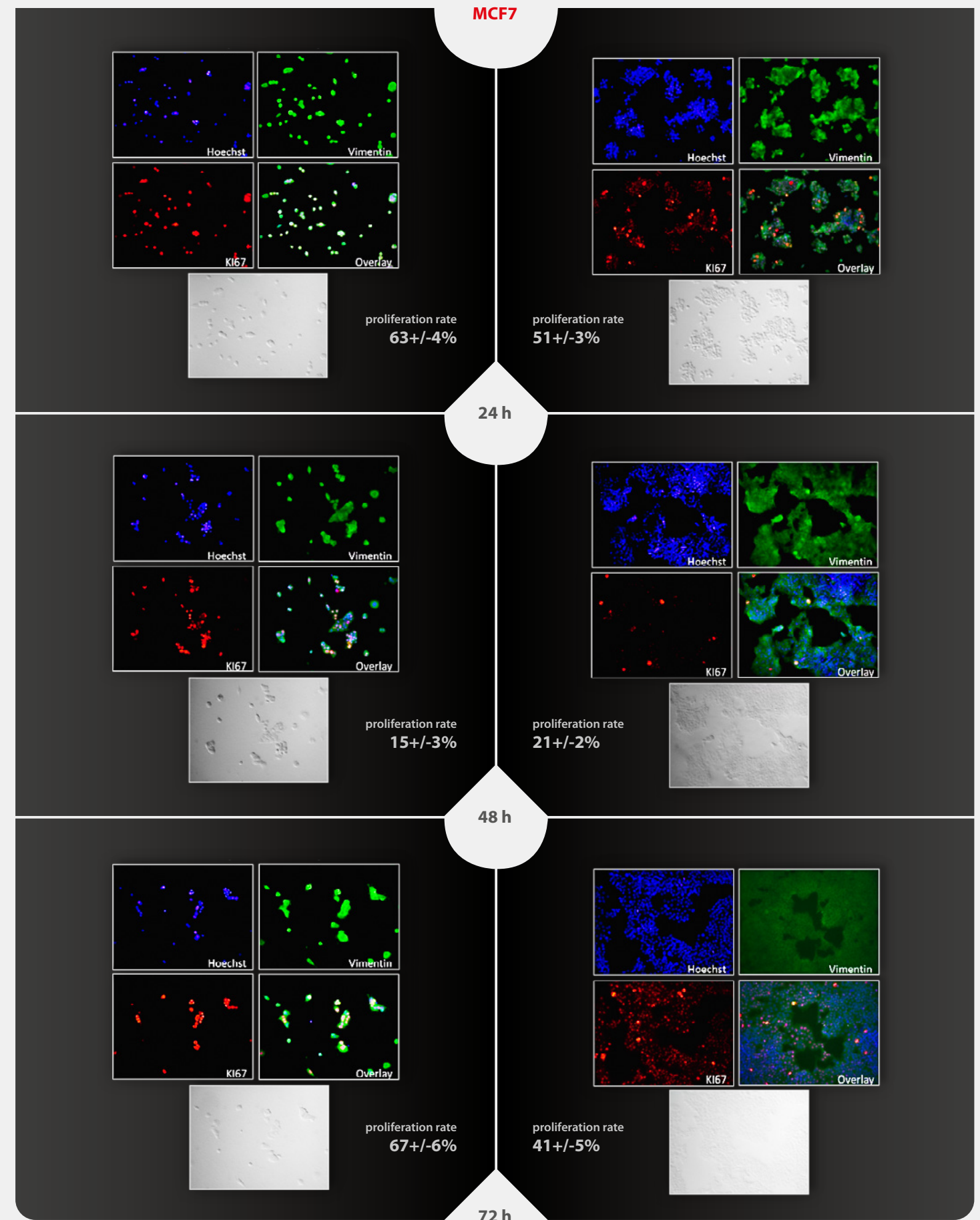
DROPLET MICROARRAY

POLY-LYSINE COATED COVERSLIPS



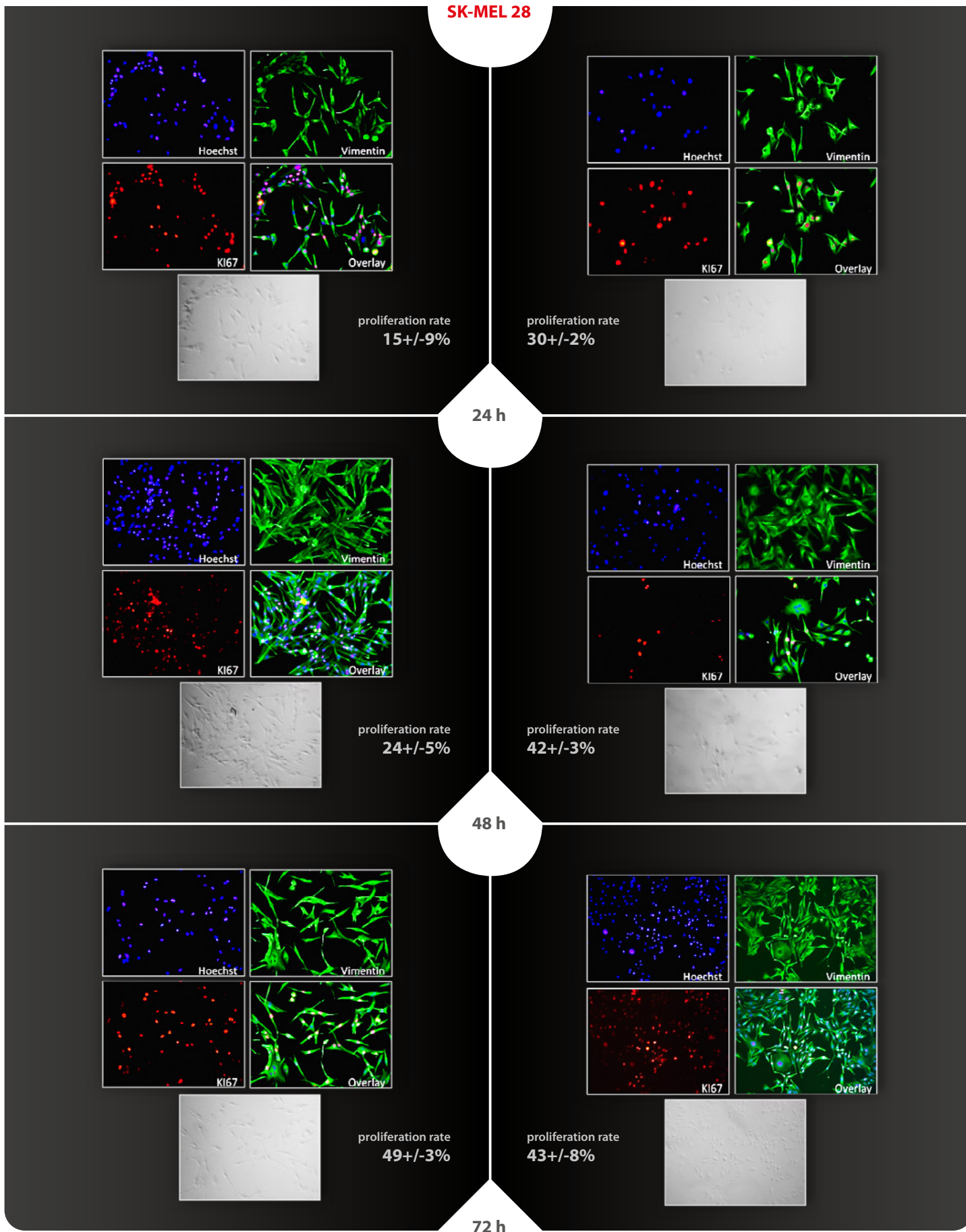
DROPLET MICROARRAY

POLY-LYSINE COATED COVERSLIPS



DROPLET MICROARRAY

POLY-LYSINE COATED COVERSLEIPS

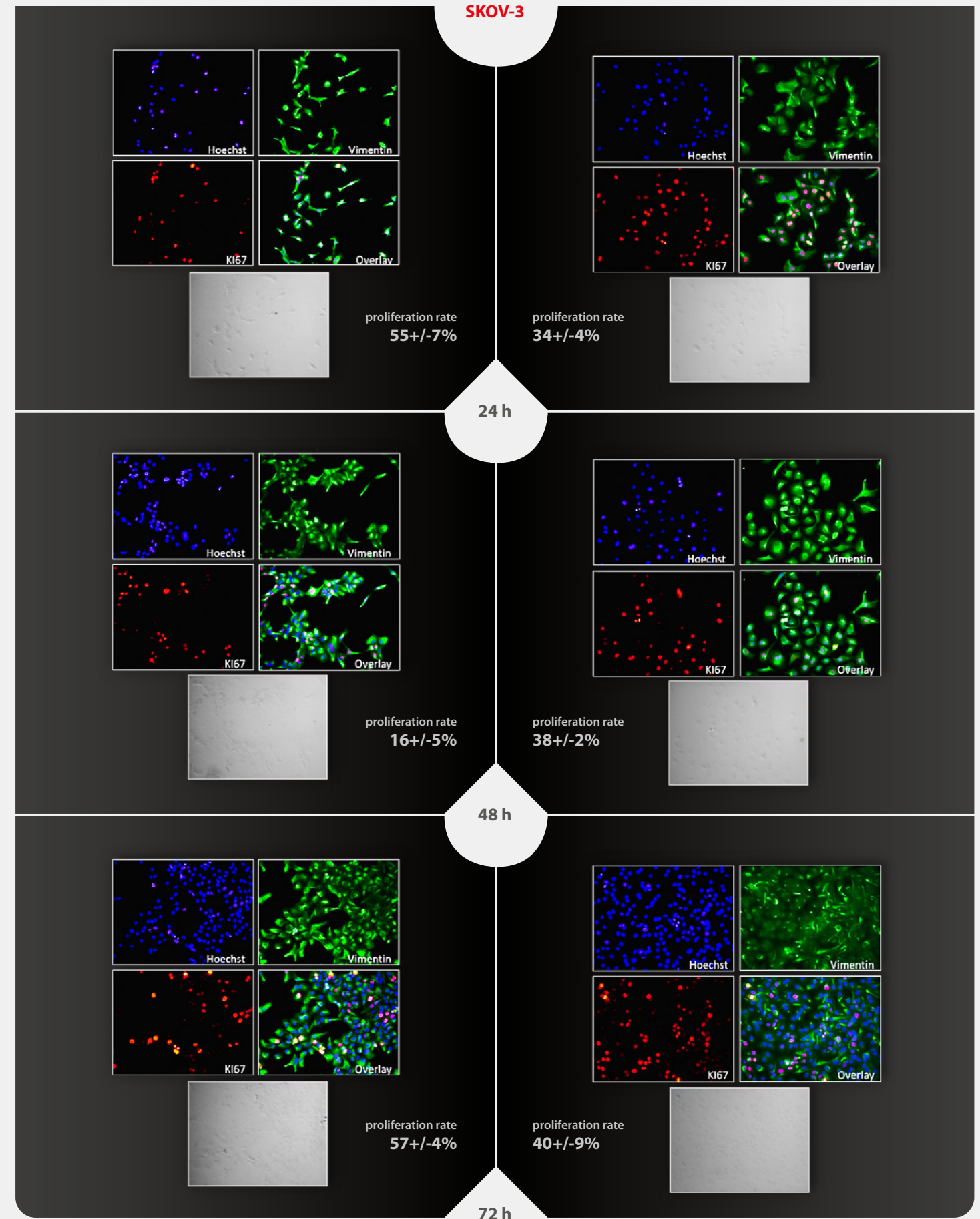


72 h

Proliferation rate is calculated from 5 spots on DMA or 5 regions on a coverslip.

DROPLET MICROARRAY

POLY-LYSINE COATED COVERSLEIPS



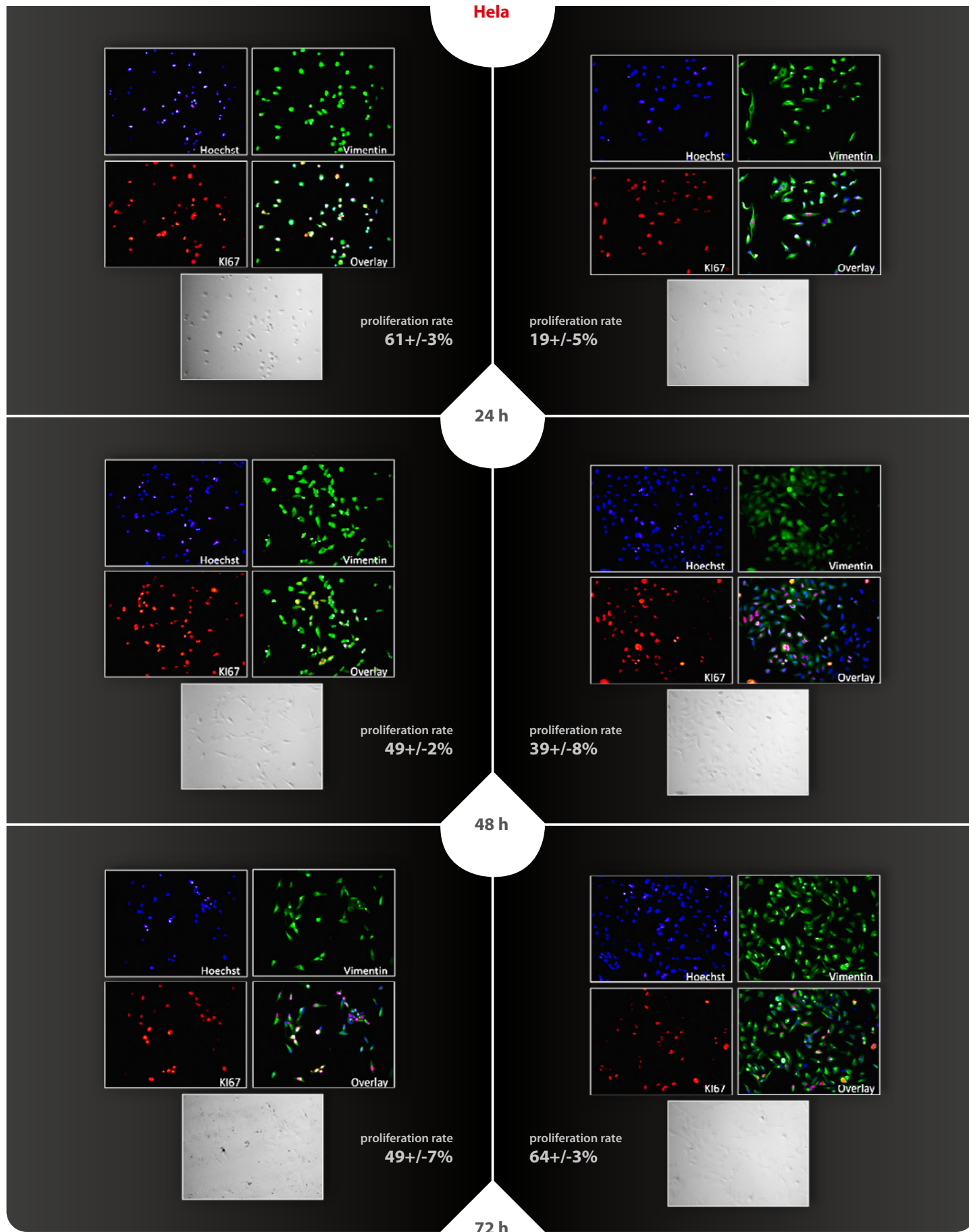
72 h

Proliferation rate is calculated from 5 spots on DMA or 5 regions on a coverslip.

DROPLET MICROARRAY

POLY-LYSINE COATED COVERSLEIPS

Hela



24 h

48 h

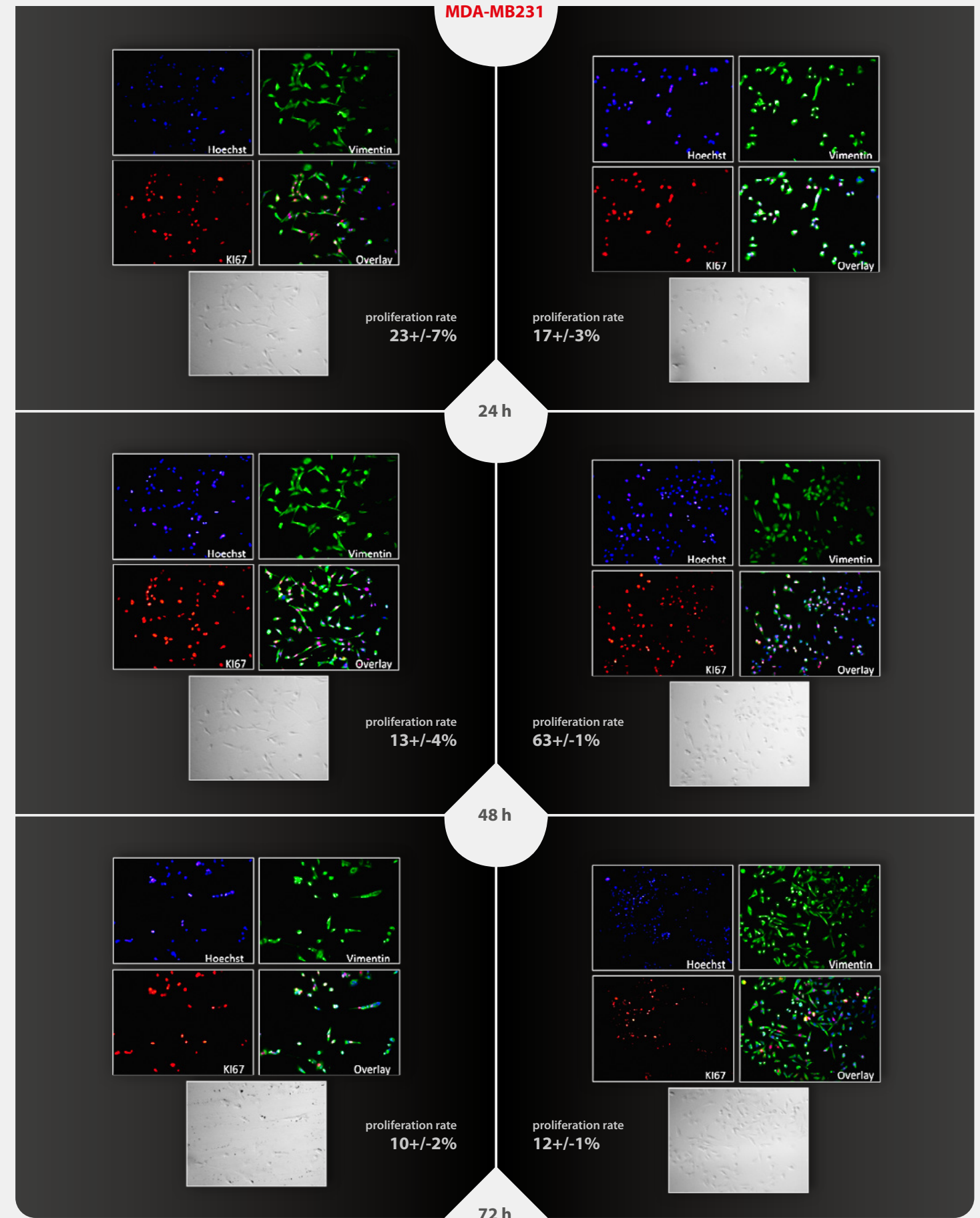
72 h

Proliferation rate is calculated from 5 spots on DMA or 5 regions on a coverslip.

DROPLET MICROARRAY

POLY-LYSINE COATED COVERSLEIPS

MDA-MB231



24 h

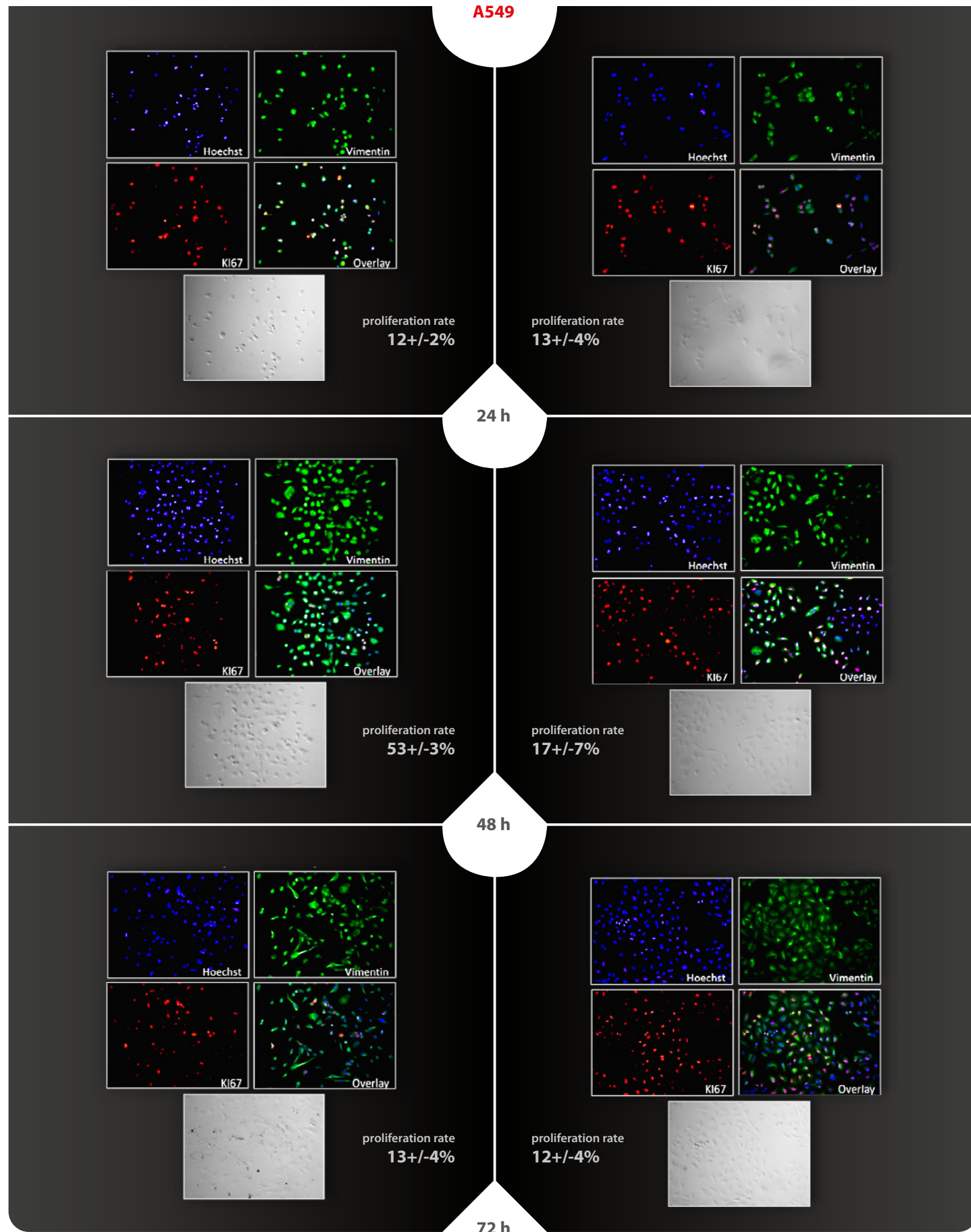
48 h

72 h

Proliferation rate is calculated from 5 spots on DMA or 5 regions on a coverslip.

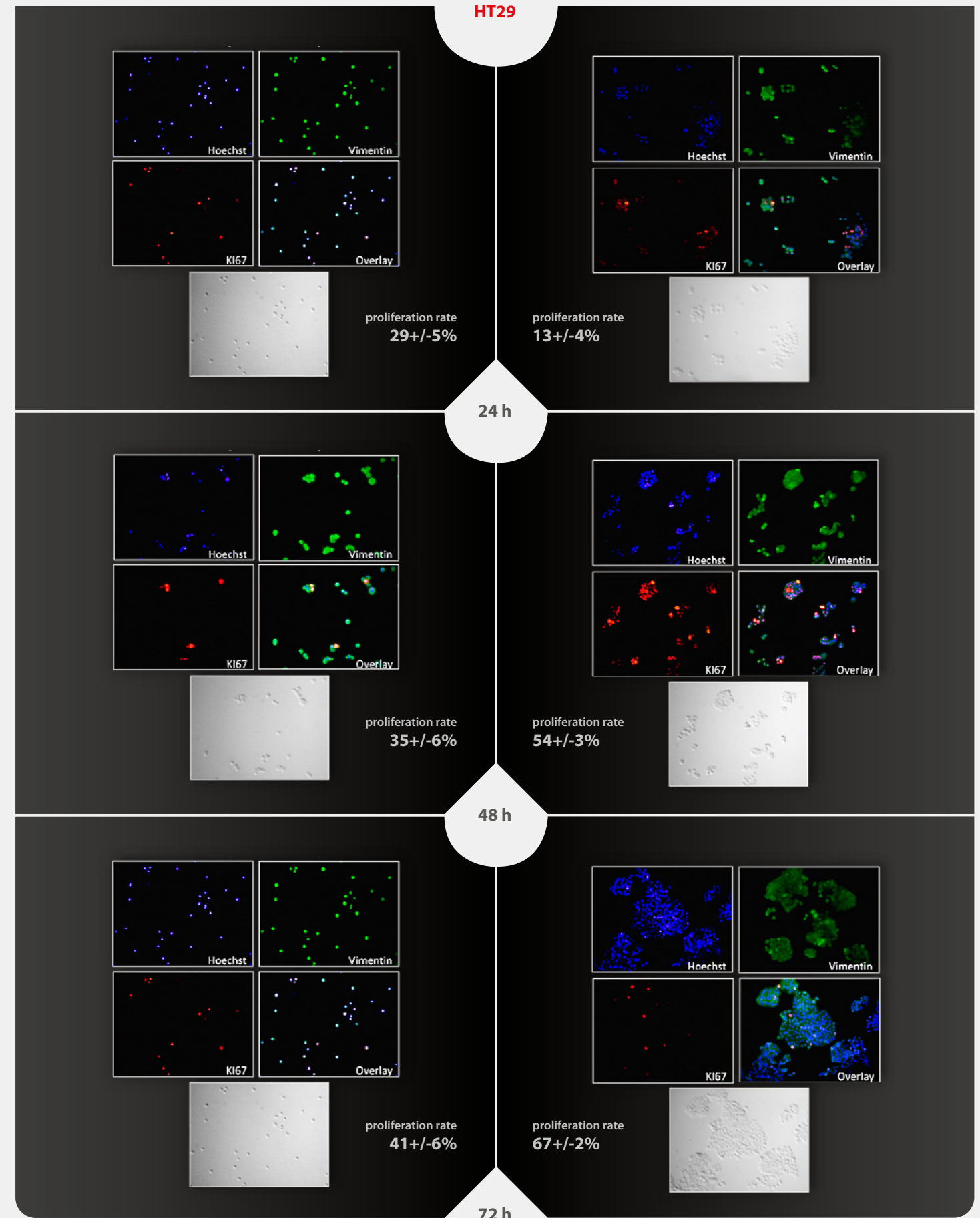
DROPLET MICROARRAY

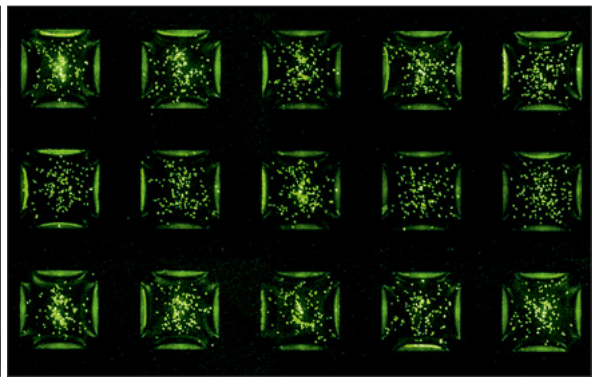
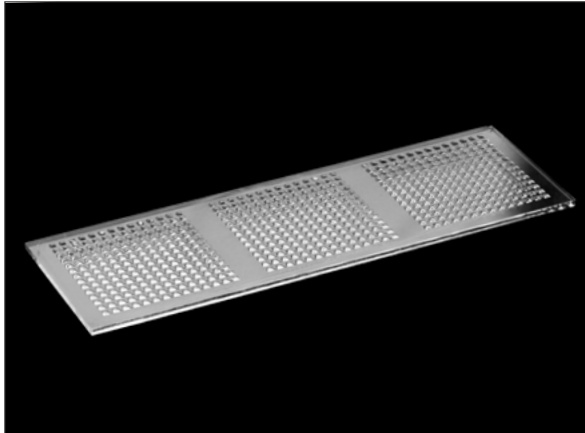
POLY-LYSINE COATED COVERSLEIPS



DROPLET MICROARRAY

POLY-LYSINE COATED COVERSLEIPS





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