



- 1 *L929 cells cultivated in micro incubator chamber.*
- 2 *Miniaturized incubator microscope.*
- 3 *Red fluorescent micro beads with 10  $\mu\text{m}$  diameter.*

## Miniaturized Incubator Microscope for Live Cell Imaging

### Description

IBMT has developed a compact and portable system for live-cell time-lapse imaging. The system combines a miniaturized microscope with a micro incubator chamber and allows for cell culturing without the need of expensive and bulky equipment. Cells are cultivated in a micro incubator chamber with integrated temperature regulation. Homogeneous medium exchange at a very low flow rate keeps the pH stable during cell culture. Alternatively, cell samples on exchangeable glass slides can be investigated. With the miniaturized microscope time-lapse bright-field imaging of cultured cells can be performed. Additional optical components allow for taking fluorescence images at different wavelengths.

### Features

- Compact and portable system
- Size: 8 cm x 8 cm x 12 cm
- Low equipment costs
- Low cost of consumables (cell culture medium)
- Customized system for cell analysis, either with micro incubator chamber or with glass slides
- CMOS camera chip, pixel size < 2  $\mu\text{m}$
- USB camera interface
- Bright-field and fluorescence imaging
- Serial connection of multiple systems, e. g. for dilution series

### Our Offer

- Customer-specific adaptation of the miniaturized incubator microscope

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