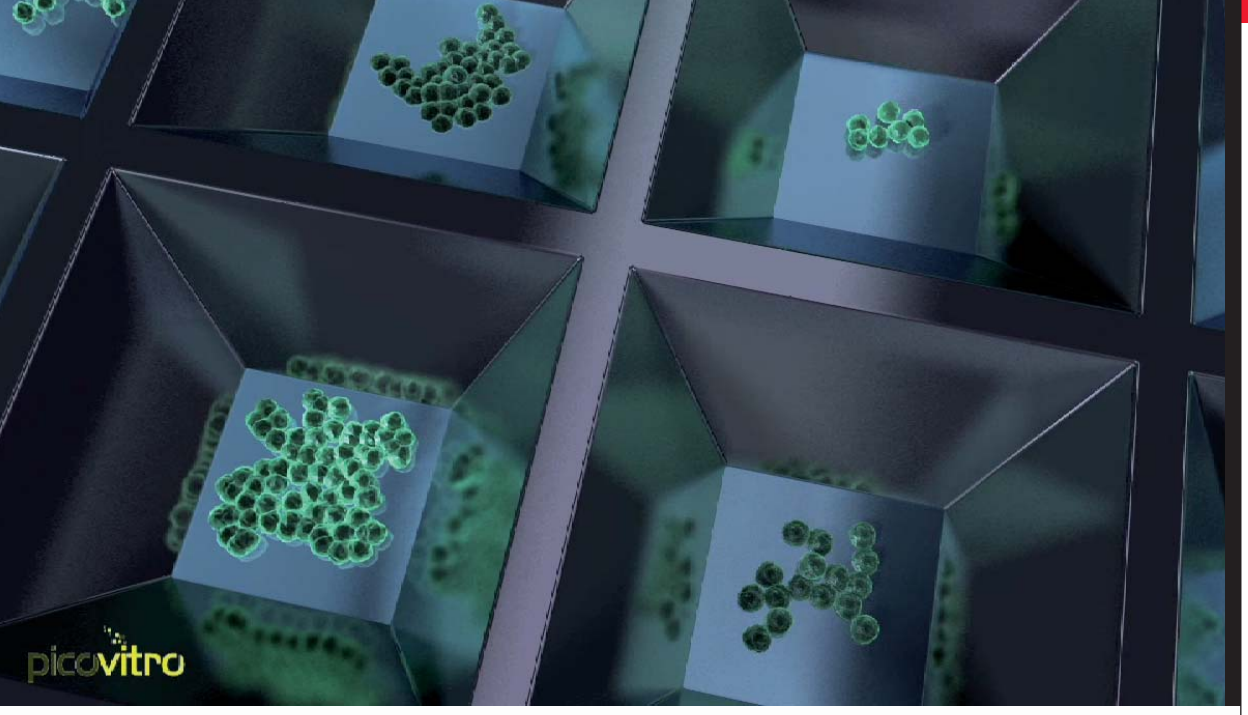


picovitro

Synergies in High Content Screening

New Picovitro HCS Microwell Slides for
Leica HCS A High Content Screening Automation

Living up to Life

Leica
MICROSYSTEMS

The Perfect Match: Screen 672 Experiments on One Slide!

In High Content Screening (HCS), a large number of experiments have to be imaged and analyzed efficiently. Picovitro and Leica Microsystems create a joint concept for high content screening of single cell cultivation and *in vitro* imaging for medical and life science research applications.

Picovitro HCS Slides:

- At the size of a conventional slide, 672 microwells are etched in silica body, optimized for single cell culturing
- Optimal for imaging: The extremely plane silica body is bonded gluefree to the 0.17 mm glass bottom for optical perfection
- Semi-permeable silicone membrane prohibits evaporation, facilitates gas exchange, and avoids contamination
- Fully compatible to Leica HCS A screening microscopes with standard inserts

Leica HCS A Imaging Systems:

- Highest resolution is achieved by confocal point scanner and widefield systems
- Highly sensitive: spectral photomultiplier detectors and digital cameras
- Large objective range from 10x/0.4 to 100x/1.4 optimized for 0.17 mm glass bottom
- High speed 2D, 3D and 4D fully automated image acquisition

Leica HCS A Screening Solutions

- Run screens fully automated without assistance
- Predefined scanning templates for easy Picovitro applications, autofocus algorithms and drift compensation
- OME image format compatible to image analysis software
- Computer Aided Microscopy (CAM) programming interface for remote system control

New Application Package for High Content Screening!

Screening Applications:

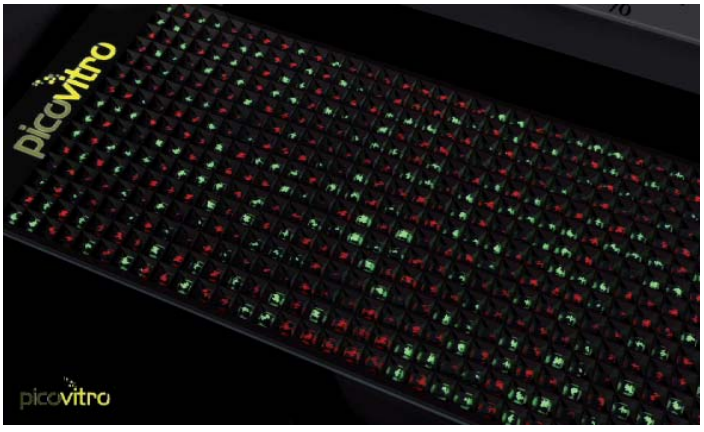
- **Primary and Stem Cells**
Rapid and efficient single cell cultivation of pupative stem cells

- **Drug Discovery**
Faster lead identification at lower costs for single cell screening

- **Cancer Research**
Identify cell heterogenies as crucial marker for cancer

- **Molecular Biology**
Study DNA, RNA and protein biosynthesis regulation efficiently

- **Microbiology**
Growth and resistance tests



Benefits:

Leica Imaging Systems

- Maximum research information
- Excellent optical quality
- Robust design
- Easy to operate

Leica HCS A Screening Solutions

- Save time by automation
- Freedom for analysis –
Link existing image analysis to OME
- Freedom for hardware: Compatible to confocal and widefield systems
- Efficient match: One well per image possible

Picovitro HCS Slides

- Large number of experiments on a small area
- Small well volume suitable for single cell cultivation
- Save costs – low amount of reagents per experiment
- No toxic side effects on living samples

Research Question → Experiment Design → Sample Preparation → **Leica High Content Screening Automation** → Data Management → Content Analysis → Research Result

“With the user, for the user”
Leica Microsystems

Leica Microsystems operates globally in four divisions, where we rank with the market leaders.

• Life Science Division

The Leica Microsystems Life Science Division supports the imaging needs of the scientific community with advanced innovation and technical expertise for the visualization, measurement, and analysis of microstructures. Our strong focus on understanding scientific applications puts Leica Microsystems’ customers at the leading edge of science.

• Industry Division

The Leica Microsystems Industry Division’s focus is to support customers’ pursuit of the highest quality end result. Leica Microsystems provide the best and most innovative imaging systems to see, measure, and analyze the microstructures in routine and research industrial applications, materials science, quality control, forensic science investigation, and educational applications.

• Biosystems Division

The Leica Microsystems Biosystems Division brings histopathology labs and researchers the highest-quality, most comprehensive product range. From patient to pathologist, the range includes the ideal product for each histology step and high-productivity workflow solutions for the entire lab. With complete histology systems featuring innovative automation and Novocastra™ reagents, Leica Microsystems creates better patient care through rapid turnaround, diagnostic confidence, and close customer collaboration.

• Medical Division

The Leica Microsystems Medical Division’s focus is to partner with and support surgeons and their care of patients with the highest-quality, most innovative surgical microscope technology today and into the future.

The statement by Ernst Leitz in 1907, “with the user, for the user,” describes the fruitful collaboration with end users and driving force of innovation at Leica Microsystems. We have developed five brand values to live up to this tradition: Pioneering, High-end Quality, Team Spirit, Dedication to Science, and Continuous Improvement. For us, living up to these values means: **Living up to Life**.

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