

Living up to Life

Leica
MICROSYSTEMS

Water Immersion Micro Dispenser

Automatic supply of water immersion during experiments





Small and compact design allows utilization of all nosepiece positions. A retrofit to existing Leica DMI6000 B is possible.

ADDITIONAL BENEFITS

- › No interaction required during the experiment – Software controlled water immersion supply
- › No water damage to the instrument – Water protection collar provided
- › Prevents disruption of water film during stage movement – Intelligent design of water cap
- › Ensures best image quality – Accessibility of correction ring
- › Perform your experiments with no restrictions – Full free working distance available
- › No separate heating required – Water reservoir and micro pump fit into climate chamber

ADD NEW APPLICATIONS TO YOUR SYSTEM

Live cell research and screening applications are mainly based on samples in an aqueous solution, so the use of water objectives is becoming more and more important. Water objectives allow for aberration free focusing into such samples. Moving into the sample will cause no loss of contrast.

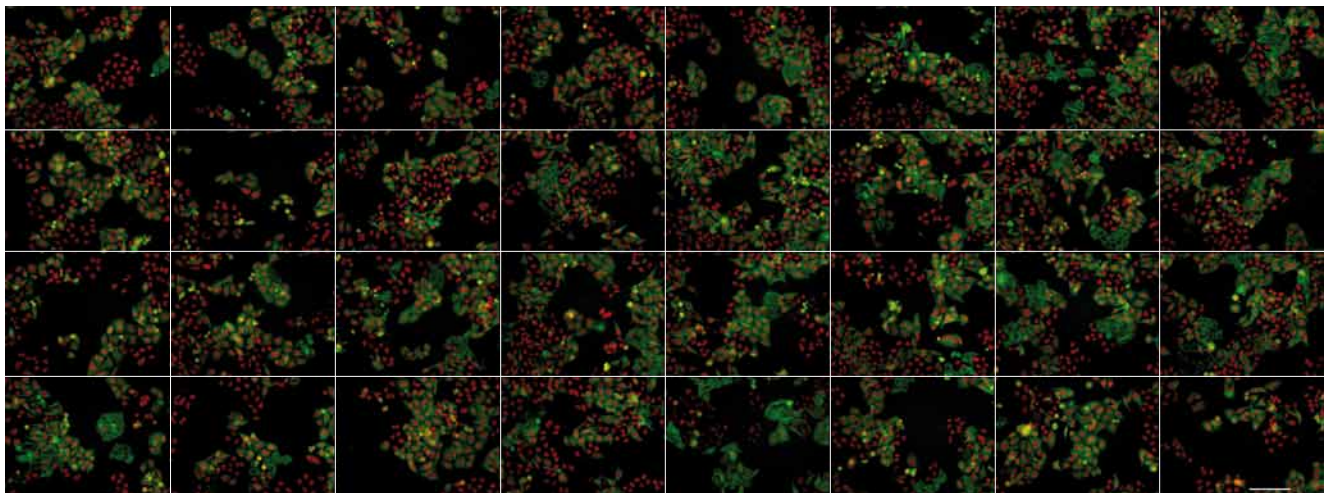
Unfortunately water evaporates at room temperature and therefore cannot be used for long term experiments. During screening or mark and find experiments the immersion film can be disrupted.

The Water Immersion Micro Dispenser overcomes these problems by adding immersion automatically during a running experiment.

This allows for applications with high resolution water objectives, for example:

- › Live-cell experiments at 37°C
- › Long-term live-cell experiments
- › Screening
- › Well plate acquisition.

In addition the user does not have to add water immersion manually. It can be added at the press of a button via the convenient control software supplied with the Water Immersion Micro Dispenser.



Multi-position time-lapse experiment covering 32 wells of a 96 well plate. Single time point of a data set with an acquisition time of 72 hours using a HCX PL APO 20x/0.70 IMM CORR CS objective with a Water Immersion Micro Dispenser attached to overcome water evaporation. Cells described in Steigemann et al.; Cell. 2009 Feb 6;136(3):473-84. Courtesy of Dr. Daniel Gerlich (ETH Zürich), Jutta Bulkescher and Dr. Stefan Terjung (ALMF, EMBL Heidelberg).