

euroimmun 

From Revvity

# EUROPattern Microscope Live



# Ultrafast computer-aided immunofluorescence microscopy.



- Fully automated image recording and state-of-the-art result evaluation on the screen – the end of the dark chamber
- Recording of high-quality immunofluorescence images in only two seconds
- Automated IFA pattern recognition and calculation of the antibody titer based on deep learning/deep convolutional neural networks
- Security and traceability thanks to automated identification of slides by means of matrix codes
- Intuitive live microscopy with multi-touch navigation and zooming directly on the computer screen
- Simple operation and directional data exchange with the LIS and other automated laboratory devices via EUROLabOffice 4.0

## EUROPattern Classifier – AI-enhanced software

The EUROPattern Classifier is a software compatible with EUROLabOffice 4.0 that automatically generates a result proposal (including titer calculation) for a constantly growing number of substrates. Its deep convolutional neural networks, a process of artificial intelligence, were intensively trained during the development of the software. This enables the algorithm to classify fluorescence patterns reliably and quickly. All data obtained for the substrates and dilutions are consolidated into one result proposal for each patient.



## User-friendly microscopy

- Compact device with lightproof housing – suited for all spatial and light conditions
- Capacity for 5 slides with up to 10 reaction fields
- Matrix code reader for slide recognition providing full traceability
- Automated image acquisition in record time due to ultrafast auto-focussing based on a novel laser focussing technology
- Compact design with only one objective (20x) for all substrates
- High-resolution camera for high-definition images

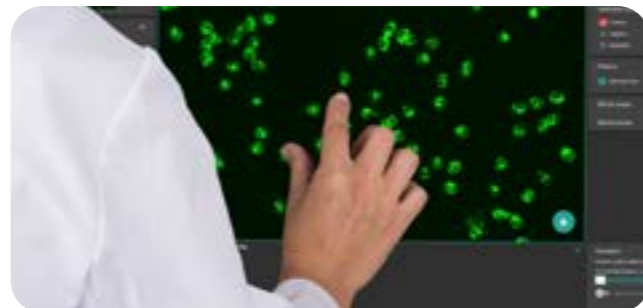


## Fluorescence standardisation

- Constant and standardised fluorescence signals for all devices by means of an integrated fluorescence standard
- Unique automated calibration of the microscope for comparability between results from different devices

## Live microscopy

- Intuitive touchscreen user interface
- Direct image enlargement (pinch to zoom) and changing the displayed section possible during live microscopy
- Microscopy work in pairs without a discussion tube



## Software-based evaluation support for a wide range of substrates

### ANA diagnostics

- HEp-2/HEp-20-10 cells
- *Crithidia luciliae*

### Diagnostics of coeliac disease

- Liver (monkey) IgA
- Oesophagus (monkey) IgA

### Diagnostics of autoimmune liver diseases

- Liver (rat)
- Kidney (rat)
- Stomach (rat)
- VSM47 cells (rat)

### ANCA diagnostics

- Granulocytes
- HEp-2 cells + granulocytes (EOH)
- EUROPLUS antigen dots

### Diagnostics based on antigen-expressing cells

- Neurology: e.g. AMPA 1/2, NMDAR, GABAR B1/B2, LGI1, CASPR2, DPPX, aquaporin-4 and MOG
- Nephrology: PLA2R and THSD7A

## Intelligent data management with EUROLabOffice 4.0

The bidirectional communication between the EUROPattern Microscope Live and the LIS is provided by the laboratory management software EUROLabOffice 4.0. Due to its complete integration in the laboratory, the user-friendly middleware enables secure, fast and traceable data exchange between different workstations and instruments as well as different locations.

All information is clearly presented in the results window. This complete view on the patient, including detailed patient history, lot and process information, dilutions and substrates as well as the automatically generated pattern and titer suggestions, enables fast and reliable result evaluation.

The screenshot displays the EUROLabOffice 4.0 interface. The central area shows a microscope image of green fluorescent cells. To the left, there are panels for 'Dilutions', 'Substrates', 'Process information', and 'Lot information'. To the right, there is a 'Classifier' panel with options like 'Homogeneous', 'Speckled', 'Nuclear dots', 'Cytoplasmic', and 'Nuclear membrane'. Below the image, there is a 'Patient history' section with direct access to individual results and images. A 'Result proposal' section is also visible at the top right.

- Dilutions
- Substrates
- Process information
- Lot information
- Patient history with direct access to individual results and images
- Result proposal
- Pattern and titer proposals
- Positive/negative classification

Find out more at [www.euroimmun.com](http://www.euroimmun.com)  
or contact us directly at  
[www.euroimmun.com/contact](http://www.euroimmun.com/contact)

