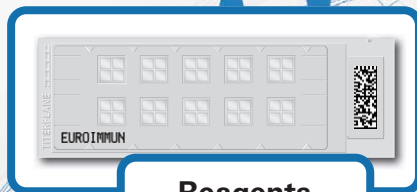




IIFT automation for small and medium laboratories



Reagents



Processing



**Data processing and
laboratory management**



Microscopy

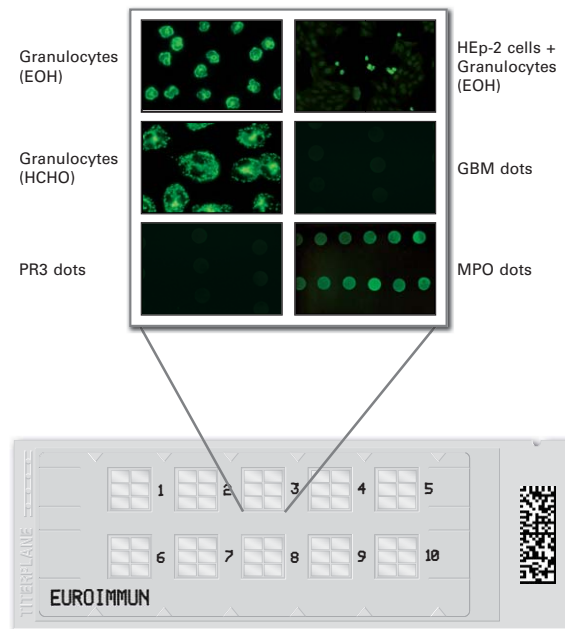


Paperless result entry



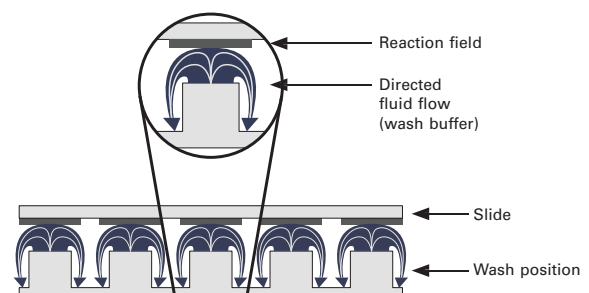
EUROIMMUN reagents – quality meets functionality

- BIOCHIP technology allows:
 - Multiparameter analysis: different substances combined as a mosaic in one test field
 - Monospecific confirmation of results with antigen dots (EUROPLUS)
 - High lot consistency
- Slides are equipped with a matrix code for maximum reliability and traceability
- Comprehensive product range for the following parameters:
 - ANA (HEp-20-10 cells: > 150 mitoses per BIOCHIP for optimal interpretability)
 - ANCA (combination of ethanol (EOH)- and formalin (HCHO)-fixed granulocytes for differentiation of vasculitis from chronic inflammatory bowel diseases (CIBD)
 - Neural autoantibodies (unique parameter spectrum)
 - EmA (distinct pattern on primate liver)
 - AMA/ASMA (VSM47 cells for F-actin)
 - Crithidia & Crithidia sensitive for screening
 - Organ-specific autoantibodies
 - Infection parameters



MERGITE! – unique washing technology

- Fully automated washing of TITERPLANE slides with constant washing quality for reproducible results
- No cross contamination of reaction fields due to field-by-field washing with directed and controlled fluid flows
- Efficiency due to simultaneous washing of up to 50 reaction fields
- Compact stand-alone tabletop device for convenient operation on the laboratory bench
- Convenient operation and minimal familiarisation time due to intuitive user interface





IF Sprinter – fully automated processing

- Fully automated processing of immunofluorescence tests, from the dilution and dispensing of samples to the incubation and washing of microscope slides
 - Up to 96 samples and 15 slides per run
 - Automated sample registration with the integrated bar-code reader during insertion of the rack into the device
 - Secure slide identification due to optionally available DataMatrix code reader
 - Up to 12 controls and 8 reagents in racks customised for EUROIMMUN reagents
 - Simple operation for short hands-on times
 - Online connection to EUROLabOffice or LIS



EUROStar III Plus – reliable immunofluorescence microscopy

- Secure and reproducible results due to constant light intensity
- Economical: LED with a useful life of more than 50,000 hours, low current consumption
- Environmentally friendly: no mercury, no UV radiation
- User-friendly: The LED is on full power directly after switch-on.
- Support for quality management: EUROIMMUN regularly checks the light output of installed EUROStar III Plus microscopes and provides a certificate.
- Reliability: Worldwide there are more than 1000 EUROStar microscopes in use.
- Upgrade feature: The cLED from EUROIMMUN is available as a separate module for combination with various other microscopes.



EUROPattern Microscope Live – Top-speed 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 images in only two seconds – a new dimension of fluorescence microscopy
- Security and traceability thanks to automated identification of slides by means of matrix codes
- Constant and standardised fluorescence signals for all devices due to an integrated fluorescence standard
- Unique automated calibration of the microscope for comparability between results from different devices
- Intuitive live microscopy with multi-touch navigation and zooming directly on the computer screen
- Bidirectional data exchange with the laboratory information system (LIS) for paperless working and secure information flows



EUROLabOffice – the control centre for your laboratory

- Integrity of data and results due to an entirely paperless work process (quick, simple and reliable)
- Automated data processing and communication without transmission errors
- Automatic creation of electronic worklists
- Reporting support: day's results for a patient, patient history, search function, documentation and archiving
- Optimisation of existing laboratory processes, various expansion modules available
- Interface to laboratory management system (LIS) for bidirectional data exchange and optimal connection to EUROIMMUN devices



EUROPattern – computer-aided IIFT evaluation

Pattern recognition based on deep convolutional neural networks

EUROPattern automatically generates result suggestions, including titer calculations, for a continually increasing number of substrates. This initially involves classification of the detected fluorescence patterns by means of deep convolutional neural networks, a deep-learning method. Finally, all the individual findings obtained with the substrates and dilutions are consolidated into a final result for each patient.

ANA diagnostics

- **HEp-2/HEp-20-10 cells:** Automatically generated pattern and titer suggestions with confidence values for nine fluorescence patterns according to ICAP* (homogeneous, speckled, dense fine-speckled, nucleolar, nuclear dots, centromeres, nuclear membrane, AMA and cytoplasmic) and any combinations thereof

* International Consensus on Antinuclear Antibody (ANA) Pattern

- **Crithidia luciliae:** Automated positive–negative classification and titer suggestions based on the specific kinetoplast fluorescence for the detection of anti-dsDNA antibodies

ANCA diagnostics

- **Granulocytes:** Automatically generated pattern and titer suggestions with confidence values for the fluorescence patterns pANCA, cANCA and atypical ANCA

Diagnostics of autoimmune liver diseases

- **Liver (rat):** Automated positive–negative classification for relevant ANA and identification of anti-LKM-like patterns ("LKM-like", is given as "anti-LKM" pattern after a confirmatory result on kidney tissue) to support the diagnosis of autoimmune hepatitis types 1 and 2
- **Kidney (rat):** Automated positive–negative classification for AMA, specific for primary biliary cholangitis, and identification of anti-LKM-like patterns ("LKM-like", is given as "anti-LKM" pattern after a confirmatory result on liver tissue; suspected autoimmune hepatitis type 2)

