

akiron[®]NEO

Automated digital IFA



Small and Fast System for Automation of IFA

akiron[®]NEO is a small instrument for the fully automated and standardized imaging and data processing of immunofluorescence assays in autoimmune diseases. The easily operated imager provides high quality results in every day laboratory routine and a short period of time.

akiron[®]NEO proves to be invaluable for all of those users having small lab bench space available only.

Applications for the **akiron[®]NEO** are available in a big variety of tests ranging from the detection of autoantibodies to HEp-2 cells (ANA) and granulocytes (ANCA), as well as tissues (several antibodies) and automated CytoBead[®] Assays in the area of gastroenterology and rheumatology (especially for connective tissue diseases and vasculitis).

Features

- Fully automated screening and objective pattern and intensity evaluation of cells (ANA and ANCA) in about 30 seconds
- Easily operated by touchscreen
- Digital archiving of fluorescence images and results allows searching of results even after years (data management included)
- Quantification of antibodies (CytoBead[®] technology) in U/ml or IU/ml with lot specific standard curves using the microbeads 4-point calibration; comparable to ELISA)
- Automated titer detection based on the screening dilution (ANA and ANCA)
- Documentation of tissue sections via overview images
- Standardized and reliable results between different instruments due to intensity calibration
- Overall report of all relevant results in pdf- and xls-formats
- Single well report in pdf-format (including cell images)
- LIMS Connectivity



Optics

Construction	Upright, with 90° folded lightpath
Objective lens	20x/0.45
On screen magnification	360x (with 20x lens)
Light source	High power LEDs (maintenance free)
Fluorescence channels	3 channels: blue (DAPI), green (FITC), red (Cy5)
Camera	2.3 MPix; 1/1,2" CMOS

Automation

Autofocus	Adaptive image based autofocus; moving lens; 1 mm range; 1 µm resolution
xy-Table	Motorized 80 mm x 100 mm range
Image acquisition	Preset and user generated scripts Up to 24 samples (2 slides)

Connections

2 USB; 1 Ethernet

Dimensions

Size (HxWxD)	32 cm x 28 cm x 46 cm
Weight	8 kg

Electrical

Power requirements	12 V DC; <5 A
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