

ORCA FLUORESCENCE IMAGER

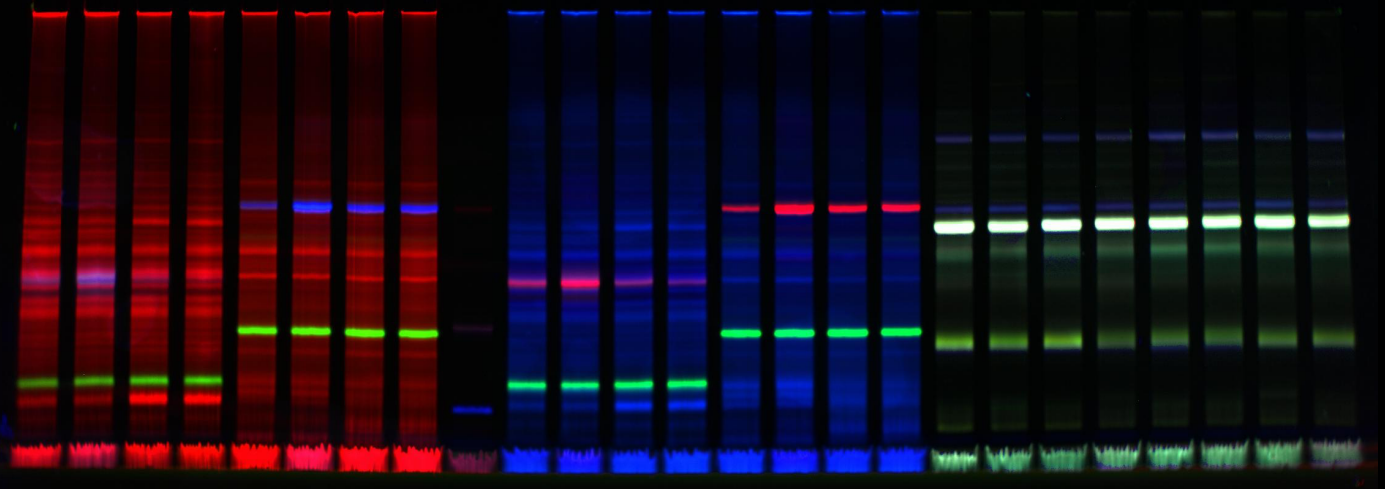
large area multiplex fluorescence analysis

The ORCA Fluorescence Imager is designed for the standardized, sensitive and rapid analysis of fluorescent objects such as large size 1D or 2D protein gels & blots. Offering at least the specificity and almost the same sensitivity as laser-scanners the device acquires fluorescent images up to 30 x faster.

The new ORCA Fluorescence Imager.
Made in Germany.



PAGE and IEF imaging



Refraction-2D™ imaging



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1D Gel Imaging

SDS-PAGE imaging - gel size 26 x 10 cm

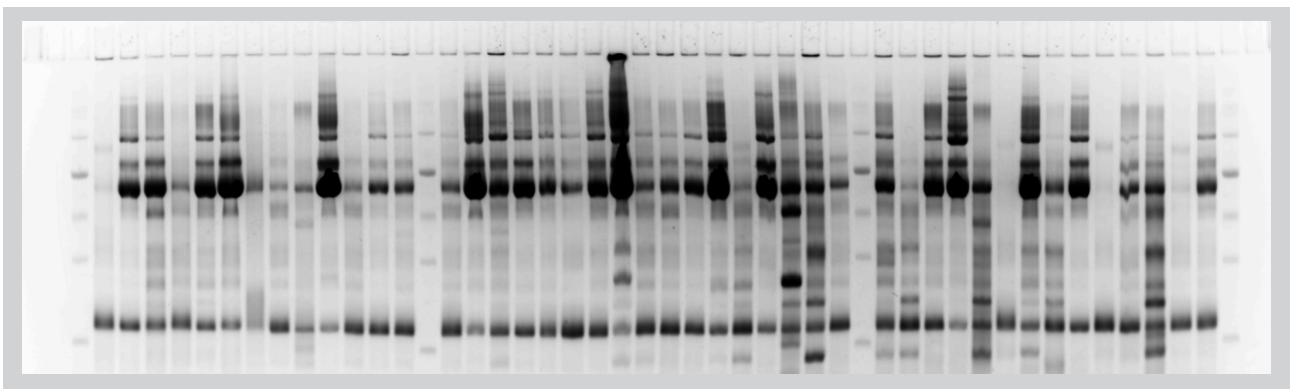


Fig 1. Digital image of a VELUM Gold Precast 1D SDS Gel with human urine protein using the SPL staining free system. Image acquired by ORCA Fluorescence Imager (LED: Red HP; filter: G300BP, bit depth: 16 bit; exposure time: 0,65sec).

Isoelectric Focussing (IEF) Imaging - gel size 26 x 10 cm

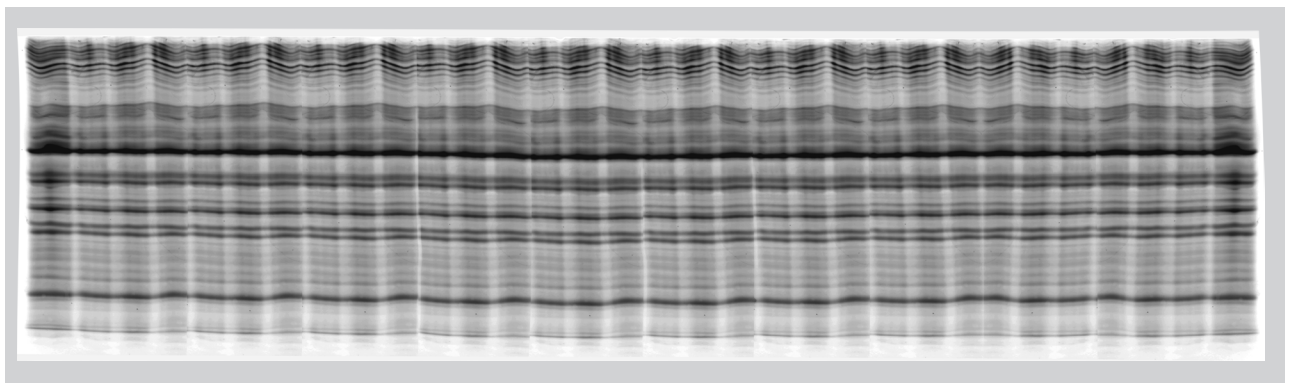


Fig 2. Digital image of a VELUM Precast IEF Gel with protein derived from potatoe using the SPL staining free system. Image acquired by OCRA Fluorescence Imager (LED: Red HP; filter: G300BP; bit depth: 16 bit; exposure time: 1,50sec).

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2D Gel Imaging

2D Gel Imaging (24 x 20 cm) : ORCA FLUORESCENCE IMAGER

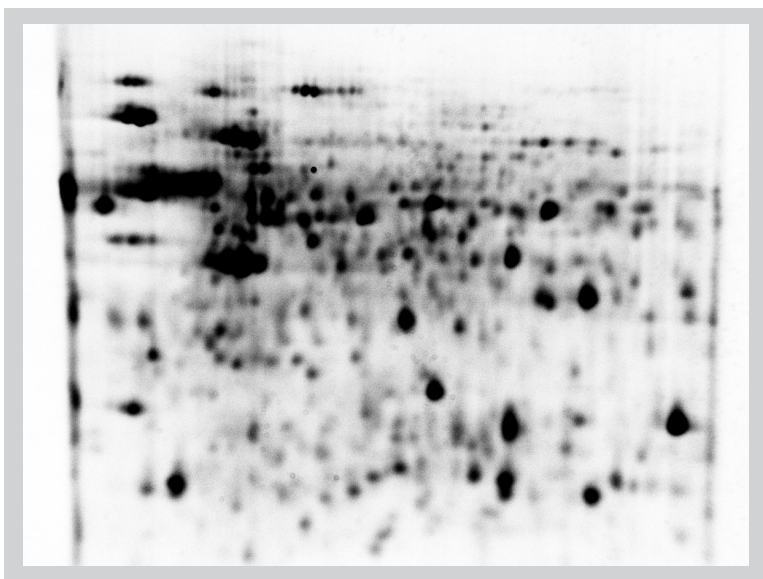


Fig 3. LED: Red HP; filter: G300BP;
bit depth: 16 bit; sample: 50 μ g total
protein from *M. modiolus* pre-labeled
with G-Dye300 (minimal labeling).
Exposure time: 15sec.

Reference Imaging: Typhoon FLA 9000

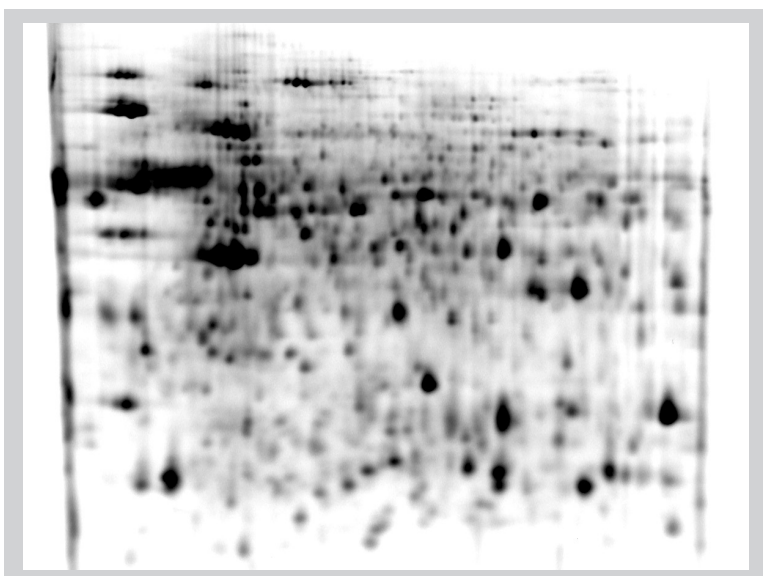


Fig 4. Laser: 635 nm LD;
LPR filter; bit depth: 16 bit; sample:
50 μ g total protein from *M. modiolus*
pre-labeled with G-Dye300 (minimal
labeling). Scanning time: 12min.

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Instrument specifications I

Power RGB Fluorescence



New High Power LEDs provide very strong excitation of green, red and blue fluorophores. To prevent any crosstalk the emitted light is specifically filtered by LED and lens band pass filters.

Large Imaging Area



The special design of the device hard- and software allows for the large detection area of 25 x 20 cm for homogenous multiplex fluorescence imaging.

High Sensitivity



The high sensitivity is provided by the strong fluorescent excitation and sensitivity detection by a peltier cooled CCD camera with 6.1 MP and true 16 bit data acquisition.

Rapid Image Acquisition



The acquisition of fluorescent images is very fast, e.g. Western Blots: 0.2 - 1.0 sec per fluorophore, for 1D gels 1-2 sec per fluorophore, for 2D gels 10-30 sec per fluorophore.

Red Coomassie Imaging



Colloidal Coomassie stainings can be sensitively detected by red power fluorescence image acquisition.

Expert Support



We provide remote- and hands-on technical and application support.

Low Maintenance



Designed for daily usage the systems robust inner and outer parts ensure for low maintenance costs and provide a long life time.

Made in Germany



Designed and produced in Germany.

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Instrument specifications II

CCD Camera	Scientific grade, 6.1 MP, true 16-bit, Peltier cooling (ΔT -35 K)
Quantum efficiency	525 nm \approx 75%, 575 nm \approx 77%, 665 nm \approx 67%
Dynamic range	> 4 orders of magnitude
Lens	Schneider-Kreuznach (F 0.95/ 25 mm)
Focusing	Precalibrated focus and image flat fielding
Fluorescence unit	Red + Blue + Green high performance LED units including specific filter and diffusor lenses
Filter	G100BP (blue), G200BP (green), G300BP (red)
Max. image area	20 x 25 cm
Sample tray	Pull-out sample tray 39 x 37 cm
Operating system	Windows 10, monitor 24 inch
Operating temperature	Up to 30°C
Size (w x h x d)	51 cm x 90 cm x 51 cm
Weight	Approx. 42 kg

Product information

Product No.	Description
PR213	ORCA Fluorescence Imager including control PC and 24" monitor
PRA464	White light transition module
PRA202	VELUM Imaging Tray for precise positioning of gels and blots
PRA203	Customized Imaging Tray for precise positioning of gels and blots

Contact

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