

ImagerBio C Combined Colorimetric MicroArray and ELISPOT Imager





ImagerBio C

Description

ImagerBio C is a compact and portable instrument for imaging colorimetric microarrays and elispots. The instrument operates in brightfield and darkfield illumination modes with bottom and top illuminations, respectively, as standard.

ImagerBio C can be used with both 96-well plates, 12×8 -well strips as well as with microscopic sample glasses (in a special adapter).

Equipped with a high-sensitivity CMOS camera and various autofocus methods.

The instrument has an automatic mechanism for ejecting 96-well plates outside the housing.

ImagerBio C can be powered by a portable 20-volt lithium-ion battery, making it a portable instrument for field studies or point-of-care.

Software

- Working in Microarray or Elispot interface
- End-User interface, with simplified functional, where user just chooses assay, loads samples and gets results. Visual validation step is optional
- Automated image acquisition, analysis and report generation (up to 12×12 array in 96 well plate in under 3 minutes)
- Automatic array finder via machine learning and image recognition
- Grid lay-outing (Manual and Automatic)
- Password protected Assay Developers interface with full access to the vast software parameters
- Analysis of images by the average/median intensity of the spots
- Qualitative/quantitative analysis of the arrays
- Creating Qualitative/quantitative analysis assays
- Quantitative assays with 4/5 parameter logistics functions, etc.
- Setting multi level interpretation thresholds for different type of samples in the same well (e.g. tolerance to egg and lettuce)
- Reports available in PDF, CSV, EXCEL files
- Control of camera exposure, gain, XYZ kinematics.



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Technical Data

Teermed Data	
Order No.	LTF00366
Illumination	Channels Brightfield, Darkfield (bottom, top illumination)
Arbitrary units measurement range	0 to 65,535
NIST Certified OD measurement range (for brightfield)	0.1 to 2.0 OD
NIST Certified Diffused reflectance meas. range (for darkfield)	2 to 99
Plates and Vessels	96 well plate / 12 × 8 well strip / 4 microscope slides
Light source	LED
Lifetime of the light source	> 10.000 hours
Data interface for unit controls / camera	USB 2.0 / USB 3.0
Camera	CMOS
Standard image resolution	1280 × 1280 pixels
Resolution	6 μm per pixel
Image formats	png or tiff, 16 bit
Focus	Manual, Automatic, adjustable via PC
Software	Included
PC requirements	CPU: Intel i7, RAM: 8 GB Video card: Nvidia GTX 1050 Ti 4GB, or better (Capability only with Nvidia cards) SSD: 256 GB, OS: Windows 10/11 (64 bit)
Overall dimensions (W \times D \times H)	330 × 345 × 150 mm
Weight, w/o power supply	not more than 6 kg
External power supply	Input AC 100–240 V 50/60 Hz, Output DC 20–24 V, 2.5A