

Nanolive CX-A

Automated holotomographic and fluorescence microscope for long-term live-cell imaging. Label-free 3D imaging of cells in real time is ensured due to the low power laser and top stage. In addition, presence of epifluorescence lamp allows correlative holographic and fluorescence imaging.

Link to manufacturer website:

<https://www.nanolive.ch/products/3d-microscopes/cx-a/>

Application

- Gentle long-term live-cell label-free 3D imaging
- Correlative holographic (3D) and fluorescence (2D) imaging
- Imaging of cell populations, single cells or organelles
- Measurement of refractive indices inside the cell

Specification

Software	EVE - data acquisition STEVE - data visualization and post-processing
Illumination	520 nm (Class 1 laser low power, sample exposure 0.2 mW/mm ²)
Epifluorescence lamp	CoolLED pE-300
Excitation filters	392/23, 474/27, 554/23 or 635/18
Emission filters	For DAPI, FITC, TRITC/Cy5 imaging (Semrock FF01-432/515/595/730)
Objective	Dry objective 60x, NA 0,8
Camera	USB 3.0 CMOS Sony IMX174 sensor <ul style="list-style-type: none">- Quantum Efficiency 70 % (at 545 nm)- Dark Noise 6,6 e⁻- Dynamic Range 73,7 dB
Module for environmental control	Tokaihit stage top incubator <ul style="list-style-type: none">- CO₂ concentration range: 5% - 20% (±0.1%)- Humidity: ~ 95%- Sample temperature: 30-40°C (±0.3°C)
Sample insert	4 dish format 96 well plate
Recommended labware	35 mm low IBIDI dish Cat.No: 80136; optional DIC lid Cat.No: 80050; recommendations: respect dish volume (1-2 ml), use same volume in each well, assure no meniscus, assure no bubbles, change medium before imaging) Nanolive 96-well format plates – recommendations: respect well volume (80-90µl), each well must have the same volume