



LUX3 Platform

Live-cell microscopy *made easy*



Why do labs choose Lux3?

The Lux3 platform is a compact live-cell analysis system designed to help researchers monitor cell cultures directly from the incubator using automated brightfield and fluorescence imaging. **See why Lux3 is being used in labs worldwide:**



Continuous cell monitoring



Automated image analysis



Fast, simple acquisition

Small footprint, big insights

The Lux3 platform allows you to visualize complex cellular biology with ease. Brightfield and fluorescence imaging combined with advanced software tools and intuitive design make the Lux3 an essential tool for every laboratory.

Key features

- **Brightfield** and fluorescence imaging
- **Fixed** field of view
- **Small** footprint
- **Powerful**, intuitive software
- **Ability** to link multiple Lux3 devices
- **User-friendly** acquisition and analysis



Why live-cell imaging?

Live-cell imaging has revolutionized cell biology research, as it offers unique advantages compared to traditional endpoint assays and other common methods of cell analysis.



Complete, real-time datasets

Measure kinetics and gather insights endpoint assays miss



Physiologically relevant assays

Assay living cells in optimal conditions — your incubator



Experimental flexibility

Record from nearly any culture vessel, multiplex readouts, and adapt workflows



No complicated steps

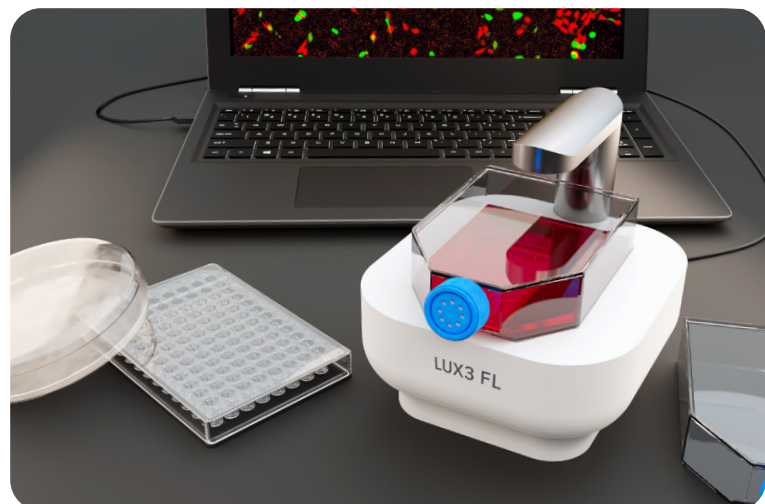
Reduce hands-on time and save money with a simple assay

Versatile applications of Lux3

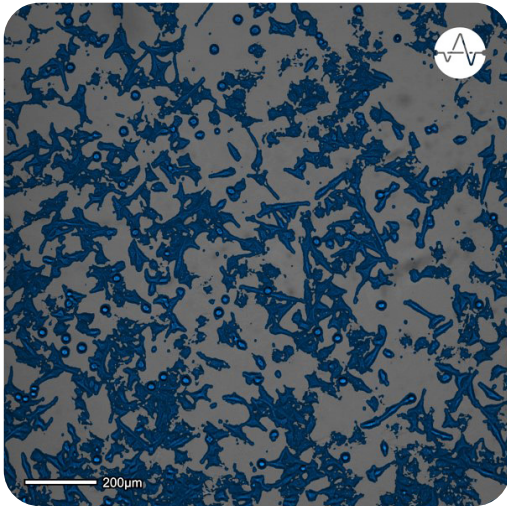
Lux3 software modules provide the tools for fast, accurate analysis and the flexibility to customize the platform to suit your research needs. Monitor growth and death in monolayers or organoids with brightfield imaging or multiplex with fluorescence assays to examine specific mechanisms or markers. **Imagine how the Lux3 platform can accelerate your experiments.**

Applications:

- Cell proliferation
- Cell migration and scratch assays
- Cytotoxicity and cell viability
- Transfection and transduction
- Microfluidic chips
- Stem cell monitoring
- Spheroids & organoids



Monitor cultures label-free with brightfield imaging

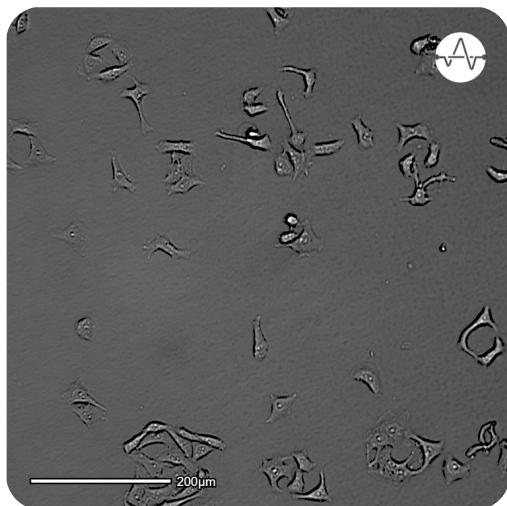
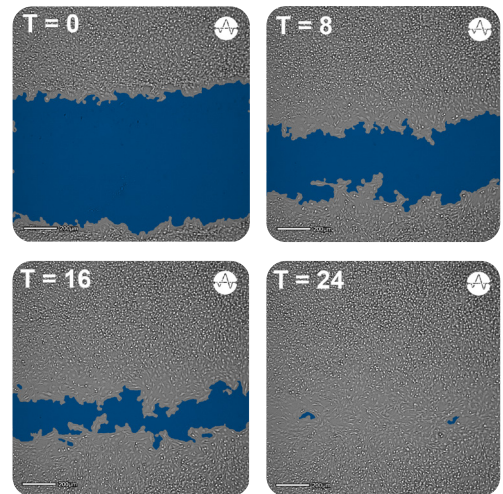


>> Health and proliferation

Changes in confluency can indicate alterations in cell proliferation, migration, or death. **Assess the health and viability of your cells in real time.**

>> Migration and wound healing

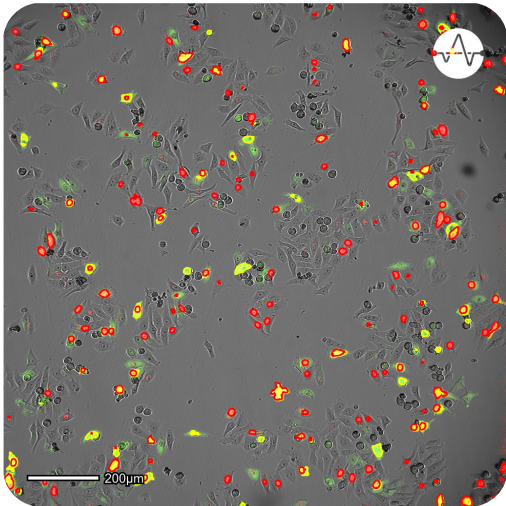
The dynamic process of cell migration and wound healing can't be captured in a single time point. A scratch assay tracks the closure of a controlled gap in a confluent cell culture over time and is **essential in oncology and regenerative medicine research.**



>> Morphology

Cell morphology refers to the study of the size, shape, and structure of cells. Monitor these changes closely to continuously evaluate cell health.

Track dynamic biology with fluorescence imaging

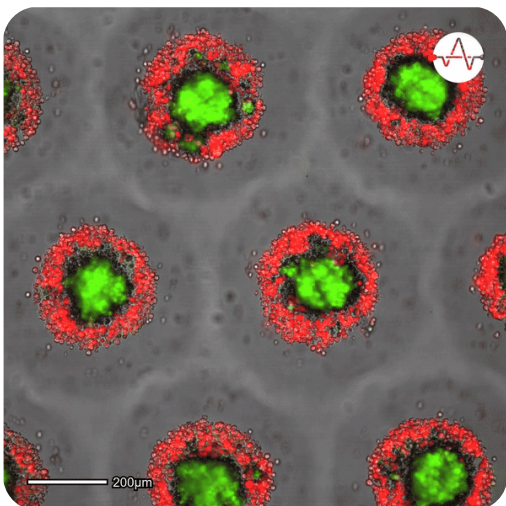
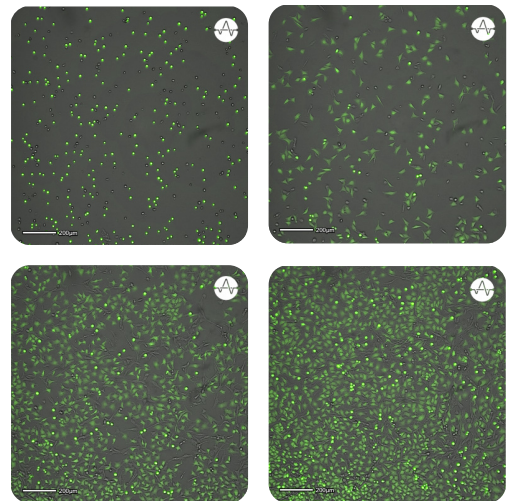


>> Transfection and transduction

Transfection and transduction techniques introduce foreign genetic material into eukaryotic cells. Quantify transfection efficiency **using red or green fluorescence channels to optimize your assays.**

>> Fluorescence analysis

Fluorescence confluency analysis using live-cell compatible labels enables deep insights into **growth dynamics, morphological changes, and responses to treatments.**



>> 3D cell cultures

Fluorescence live-cell imaging analysis offers a window into the spatial organization and dynamics of cells within a three-dimensional environment. Generate high-resolution data that **enhances our understanding of tissue development and disease progression.**

The Axion Portal: A gateway to discovery

Imaging can generate large amounts of data requiring large amounts of computing power. The Axion Portal is a cloud-based computing environment for all Axion BioSystems imaging platforms. **Discover how it can accelerate your research:**



Speed

Faster analysis with the processing power of the cloud



Accessibility

Access your data remotely and easily collaborate



Scalability

Save on infrastructure costs with unlimited data storage



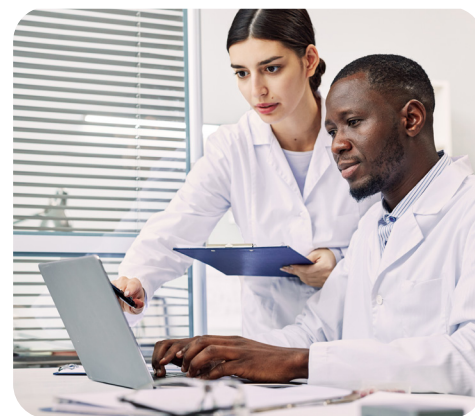
Security

Keep your data safe with secure login and data encryption

Working remotely, while working together

The Axion Portal makes it simple to analyze your data anywhere, anytime. Stay informed and make teamwork easy with convenient notifications and collaboration features.

- >> **Check your cells** *while away from the lab*
- >> **Analyze data** *with just a laptop*
- >> **Keep your data organized** *in one location*



Keep your data safe

The Axion Portal was built to be secure, simple, and powerful. To ensure data security and integrity, the Axion Portal uses the Microsoft Azure cloud environment:



- >> **All data is fully encrypted.**
- >> **Data is never lost or accidentally deleted** *thanks to triple redundant storage.*
- >> **Your data is only accessible to you.** *You control who has access to your data with secure login.*

Lux3 features comparison

There's a Lux3 system for every lab. Choose the device that works best for you.



Lux3 BR

Lux3 FL

<i>Features</i>	<i>Lux3 BR</i>	<i>Lux3 FL</i>
Automated acquisition	✓	✓
Incubator compatible	✓	✓
Duo & Multi Lux	✓	✓
Brightfield	✓	✓
Fluorescence		Green: Ex. 452/45 nm Em.512/23 nm Red: Ex. 561/14 nm Em. 630/90nm
Confluency Module	✓	✓
Scratch Assay Module	✓	✓
Fluorescence Module		✓
Dimensions & weight	166x140x135 mm - 1.3 kg	166x140x135 mm - 1.3 kg



Want to learn more?

Visit **axionbio.com** for more data, applications, and resources.

Our commitment to our customers

With over **15 years of experience** bringing innovative new products to our customers, we strive to accelerate your research by making live, functional biology more accessible. Our design philosophy is to ensure all of our products are:



Flexible

Hardware designed for broad, integrated functionality in one instrument



Easy to use

Intuitive instruments, consumables, and software for fast, easy adoption



Smart technology

Easy to run with no complicated steps, saves time and money

Contact our scientists to discuss how we can help your research with live-cell imaging:
axionbiosystems.com/contact