

INNOVATIVE SOLUTIONS FOR PRE-CLINICAL RESEARCH

IMAGING | X-RAY IRRADIATION



The logo for ONCOMED SOLUTIONS features a stylized DNA double helix icon on the left, composed of two interlocking circles in shades of blue and orange. To the right of the icon, the word "ONCOMED" is written in a large, white, sans-serif font, with the "O" being a circle that overlaps the DNA icon. Below "ONCOMED", the word "SOLUTIONS" is written in a smaller, white, sans-serif font.

Allow us to introduce ourselves...

We are OncoMed-Solutions, your trusted partner in pre-clinical research.

Since 2014, we supply scientists across Europe with innovative technology, reliable service and excellent support. We mainly operate in:

Germany | Netherlands | Switzerland | Austria
Denmark | Sweden | Finland | Norway | Belgium



OUR MISSION

With 10+ years of experience, we understand the challenges that scientists face daily. We are dedicated to help minimize these difficulties so you can **focus on what matters most: your research.**

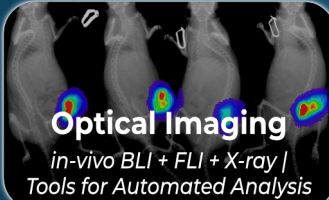
OUR PROMISE

We are dedicated to make sure you have everything you need for your research success, providing you with:

- ▶ **Innovative technologies** that help streamline your workflows, increase efficiency and reliably deliver robust data.
- ▶ **Customizable options** to match your lab's specific needs
- ▶ **Fast delivery times** to keep your research on track
- ▶ **Exceptional customer service** with quick responses. No waiting periods, no hotlines - just real people ready to help.
- ▶ **A true partnership and reliable ongoing support** - because we care about your research going smoothly.

Your work drives scientific progress, and we are dedicated to support you every step of the way.

Find what your lab needs:



Optical Imaging
*in-vivo BLI + FLI + X-ray |
Tools for Automated Analysis*

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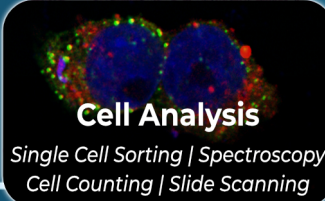
**Intravital
Microscopy**

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Microscopy
*Live Cell Imaging in Incubator |
3D Fluorescence Imaging*

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Cell Analysis
*Single Cell Sorting | Spectroscopy
Cell Counting | Slide Scanning*

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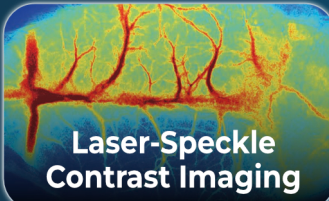
Cell Colony Tools
Colony Picking | Screening

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X-ray Imaging
2D | 3D | DXA | BMD

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**Laser-Speckle
Contrast Imaging**

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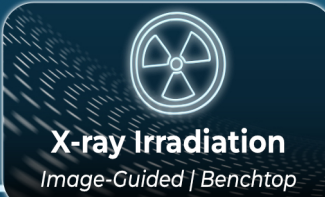
Contrast Agents
FLI | MRI | CT | Ultrasound

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Focused Ultrasound
Stereotactic | MRI-guided

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X-ray Irradiation
Image-Guided | Benchtop

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Future-proof your lab with the next generation of optical imaging:

LAGO X

- ▶ Image **up to 10 mice at once (BLI/FLI)**
- ▶ **36% more sensitive** than competitors
- ▶ **Optional X-ray imaging** (upgradable)
- ▶ **Ready to use within 5 minutes**
- ▶ **1-click data acquisition**
- ▶ 14 Excitation Wavelengths (LED sources)
- ▶ 20 Emission Filters (with customizable configuration and automatic selection)
- ▶ Compatible with all anesthesia systems
- ▶ Engineered for excellence by the pioneer of optical imaging

UNPRECEDENTED SENSITIVITY

With the highest sensitivity on the market, LAGO detects even dim signals of bioluminescence and fluorescence.

PATENTED LED ILLUMINATION

LED sources minimize noise, providing stable illumination over time with a longer lifespan than white light sources.

LAB-FRIENDLY DESIGN

Vertical doors and optimized air circulation allow you to position the LAGO against a wall, saving lab space.

LICENSE-FREE SOFTWARE

Acquire robust data **in just one click:**
The AURA software makes image acquisition and analysis fast and easy.

MINIMAL MAINTENANCE

LAGO is built with sturdy optics and air cooling - no failure-prone parts, zero leak risk. This keeps our service contracts affordable and you can enjoy peace of mind.

PROVEN LONGEVITY

With LAGO, you invest in a precise instrument that delivers reliable performance, year after year. Even the first LAGO's are still running smoothly after 10+ years of use.

LAGO X FOR IMPROVED 3R IMPLEMENTATION

REDUCE

With its ultra-high sensitivity, LAGO ensures minimal variability, so less animals are needed for reliable data.

LAGO enables longitudinal studies, minimizing the number of animals needed for reproducible results.

The user-friendly interface reduces the likelihood of human error and the need for re-running tests.

Obtain comprehensive data for each specimen with multimodal imaging. Compatible with other BRUKER systems.

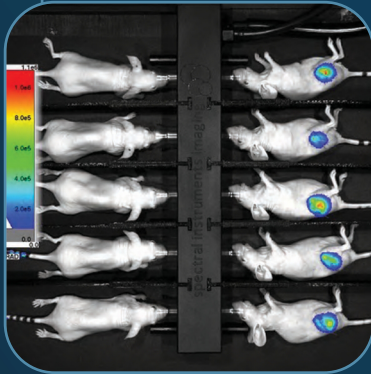
REPLACE

Verify your hypothesis in-vitro - with its anti-glare imaging mode for well plates and petri dishes, the LAGO is the tool of choice for cell / tissue culture studies.

REFINE

The mouse-friendly platform with gentle heating ensures increased animal comfort.

For optical imaging, there is no need for surgical interventions.



AMI HT at the University of Salzburg, Austria
Photo: Bundesministerium Bildung, Wissenschaft und Forschung

ALSO AVAILABLE IN TWO BENCHTOP FORMATS:

AMI HT

- 5 mouse capacity
- 10 Excitation LED's
- 10 Emission filters
- High efficiency for your benchtop

KINO

- 3 mouse capacity
- 10 Excitation LED's
- 5 Emission filters
- Budget-friendly benchtop unit





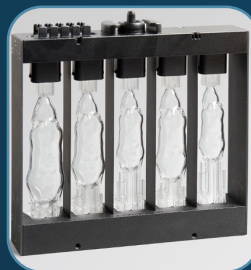
AI-powered, automated multimodal data analysis & 3D BLI

invivo Analytics

- ▶ **EFFORTLESS AUTOMATED ANALYSIS**
Save time and costs with automated, AI-powered analysis of your preclinical imaging data across modalities.
- ▶ **ROBUST DATA, FEWER ANIMALS IMPROVED 3R's**
Mice are positioned with fixed, uniform geometry using mouse-friendly BCAM's - reducing variability and increasing statistical power. This helps minimize the number of animals needed for robust results.
- ▶ **MULTIMODAL ANALYSIS - ALL IN ONE PLACE**
Analyze data across modalities in one single app. No more switching between multiple softwares to analyze data. For PET/CT, BLI and more.
- ▶ **NO NEED TO UPGRADE HARDWARE**
InvivoAX is highly compatible with all common preclinical imaging manufacturers - including Bruker. So you can likely use it with whichever system you already have!
- ▶ **ULTRA FAST, CLOUD-BASED PROCESSING**
Run even the most demanding analysis within minutes from whichever device you have available - no special computer needed.
- ▶ **GET THE MOST OUT OF YOUR IN-VIVO BLI SYSTEM**
Obtain reproducible, quantifiable 3D BLI data from your optical in-vivo



Body Conforming Animal Mould (BCAM)



invivoGRID



invivoPLOT

HOW IT WORKS

The Body Conforming Animal Mould (BCAM) holds the mouse body in a comfortable, fixed position during the imaging process. BCAM's come in various sizes with small increments, always ensuring a perfect fit.

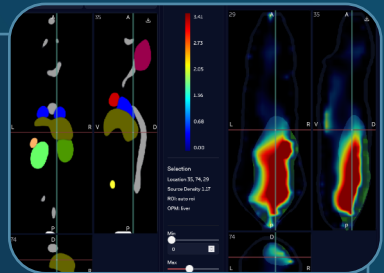
Each animal is imaged in a fixed position, which minimizes variability across animals, timepoints and modalities, allowing you to obtain more robust data with fewer animals.

This opens up the possibility for automated analysis and automatic ROI selection using an Organ Probability Map (OPM) directly from the invivo.ax web app, precisely matching the geometry of the mouse body in the BCAM.

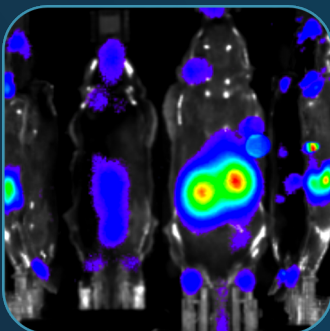
EFFORTLESS 3D ANALYSIS

Simply upload your multimodal imaging data and analyze everything on a single platform via the invivo.ax web app.

The user-friendly interface makes workflows smooth and easy, and the cloud-based processing ensures you don't need any specific hardware. Complex 3D data analysis processes that used to take hours or even days can now be done within minutes from any computer.



FROM 2D TO 3D BLI: invivoPLOT



invivoPLOT leverages the advantages of the BCAM and takes it even further: Using a mirror gantry, you acquire BLI data from dorsal, ventral and lateral views with just one acquisition. With fixed body position and OPM, the app takes tissue properties into account, allowing for 3D reconstruction of the original signal at source - not just at the surface.

This innovative method has been shown to provide quantifiable results with high reliability and accuracy, comparable to or even exceeding the accuracy of other methods. If you'd like to have a look at the validation studies, please contact us or visit our website.

World's first All-In-One Intravital Microscopy Platform

The IVM Series



- ▶ **Observe complex dynamics live as they occur inside the living organism** - for effective validation on a cellular level.
- ▶ **Advanced tissue stabilization and 4D motion compensation** provide clear images, even in dynamic organs like lung, brain and heart
- ▶ **Ultrafast scanning** allows you to track cellular movements in vivo
- ▶ **2D visualization, 3D reconstruction** and **video** capability (up to 100 fps)
- ▶ Supports Label-Free Imaging and Second Harmonic Generation (SHG)

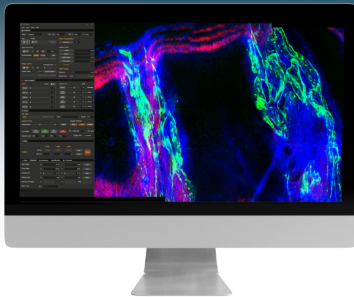


IMAGE FOUR COLORS AT ONCE

The IVM series features four channels and detectors which greatly enhances your research capabilities per sample.

ULTRA HIGH-SPEED IMAGING

Track cells or monitor drug efficacy in real-time with high framerate of up to 100 fps at 512x512px resolution.

FEWER ANIMALS, BETTER DATA

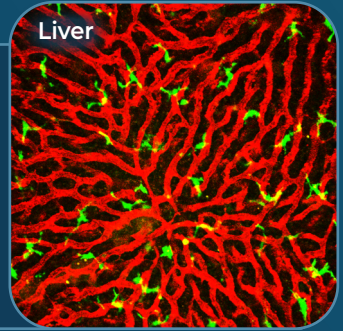
Longitudinal imaging over weeks maximizes statistical power per animal. No need to sacrifice, and significantly fewer animals needed for robust data.

ANIMAL SAFETY CHECK

Monitor your animal's condition in real time using various sensors for vital monitoring and temperature, and an optical camera.

WHY INTRAVITAL MICROSCOPY?

With intravital microscopy, you avoid artificial conditions and **study cells in their natural context: inside a living animal.** Track cell dynamics, quantify signals and obtain compelling in vivo data that is both **visually striking and scientifically robust**, revealing complex interactions that are impossible to see ex vivo.



2-PHOTON OR CONFOCAL... OR BOTH

Choose between **2-photon or confocal microscopy** - or opt for a system that **combines both and switch by just pressing a button.** 2-Photon microscopy enables **deep tissue imaging** and easy **3D reconstruction.** For special requirements, the **customizable** system can be tailored to your needs.

SAY GOODBYE TO IMPROVISATION

IVIM offers standardized protocols for reproducible results, eliminating guesswork and minimizing variability. Benefit from IVIM's **10+ years of experience in the field, outstanding support and expertise** for all research applications.

Maximize your data accuracy and get the most statistical power per animal with the IVM series.



MOVING TISSUE - STEADY IMAGING

Capture every detail with clarity, even during long observation periods and under challenging conditions: The innovative **vacuum stabilization** technology keeps tissues in place, minimizing motion artifacts. The advanced analysis software further **compensates for tissue movements.**



All-In-One Intravital Microscopy Platform for medium-sized animals

IVM-FS (Free Space)

- ▶ Confocal and Two-Photon Imaging with up to 2048 x 2048px resolution
- ▶ 4D Animal Motion Compensation (XYZ/Time)
- ▶ High-Speed Imaging (up to 50 fps)
- ▶ FOV: 100 x 100 μm up to 10 x 10 mm
- ▶ Supports label-free imaging, second and third harmonic generation



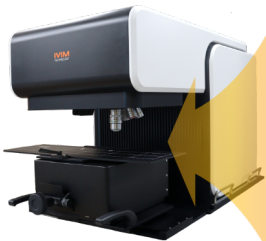
VERSATILE OPEN SPACE SETUP

IVM-FS offers a large stage (18x57x13 cm) with an open setup, making it suitable for **medium-sized animals**, such as ferrets, rabbits, guinea pigs, etc.

The IVM-FS is **ideal for behavioral neuroscience studies in awake mice** as it allows for integration of treadmills, wheels, and other third-party accessories.

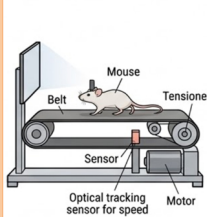
From mice to larger animals, with integrated awake imaging solutions and no darkroom needed - the IVM-FS offers great versatility for IVM applications.

AWAKE IMAGING IN BEHAVIORAL MOUSE STUDIES

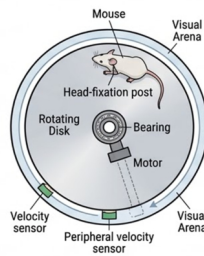


Enables real-time cellular imaging of the brain in awake mice as they move freely on a treadmill, disk or air-lifted platform

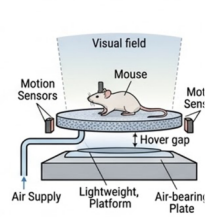
Linear/Belt treadmill



Rotating disk/circular treadmill

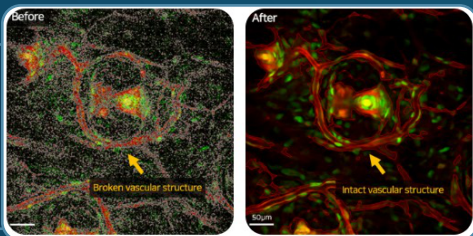


Air-lifted flat-floor platform



ADVANCED SOFTWARE

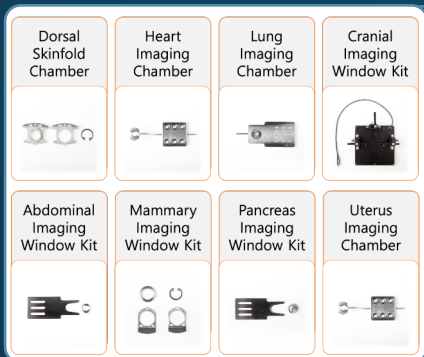
The user-friendly software utilizes powerful AI-assisted 4D motion compensation algorithms and offers extensive tools for quantitative analysis.



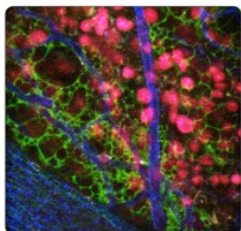
EXPERT GUIDANCE INCLUDED

With 10+ years of expertise in Intravital Microscopy and ongoing R&D efforts, IVIM offers excellent support in all research questions and a wide range of protocols.

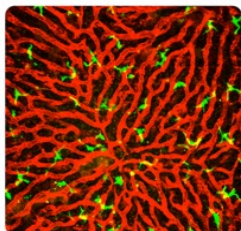
No matter which target you plan to investigate using IVM - a broad range of imaging chambers, accessories and dye kits have you covered, ensuring smooth workflows and easy imaging procedures.



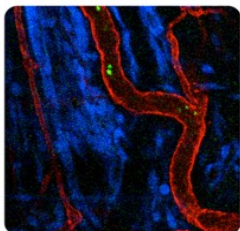
VERSATILE APPLICATIONS - FOR EXAMPLE:



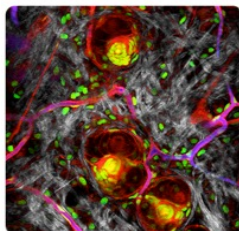
Pancreas



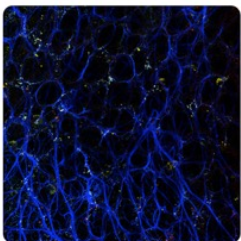
Liver



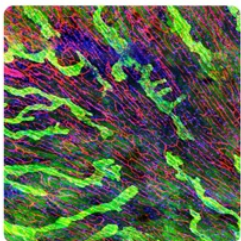
Tumor



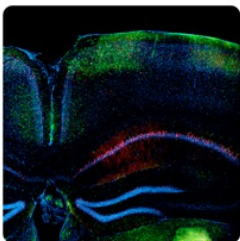
Skin



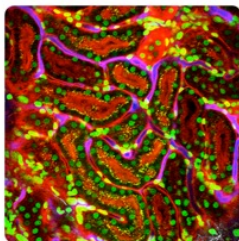
Lung



Heart



Brain



Kidney



Versatile live cell imaging inside the incubator

CELLOGER PRO

- ▶ Capture **crisp, high-resolution images and videos in real-time from inside the incubator** - without disturbing or contaminating your cells.
- ▶ The **moving camera** allows for **multi-point imaging** with fixed sample position - ensuring a **stable cell environment** while scanning.
- ▶ **Bright-Field + 2-Color Fluorescence Microscopy**
- ▶ **Time-Lapse, Z-Stacking, Image Stitching and Real-Time Video** recording capability
- ▶ **User-friendly software** with intuitive controls
- ▶ **Exceptionally rapid scanning speed**
- ▶ Compatible with a wide range of vessel types, up to 96-well plates
- ▶ Interchangeable objective lens (2X, 4X, 10X)



High-Throughput, Multi-Vessel Live Imaging

CELLOGER M-26

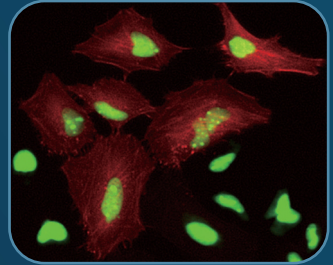
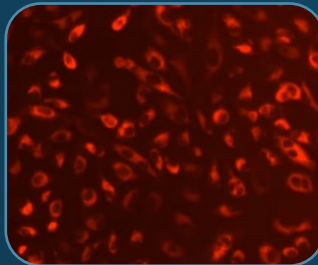
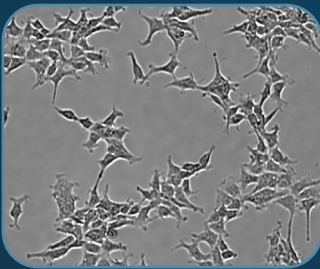
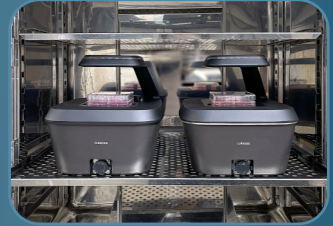
- ▶ **Image up to 6 vessels at once**, live from the inside of the incubator. Compatible with: flasks, slides, petri dishes and up to 96-well plates
- ▶ **Bright-Field + 2-Color Fluorescence Microscopy**
- ▶ **Exceptionally rapid scanning speed**
- ▶ User-interchangeable objective lens: 4X, 10X, 20X
- ▶ Moving camera, fixed stage setup **keeps your cells stable** during the imaging process
- ▶ **Time-Lapse, Z-Stacking, Image Stitching and Real-Time Video** recording capability with intuitive, user-friendly software suite



Compact, efficient live-cell imaging

CELLOGER MINI PLUS

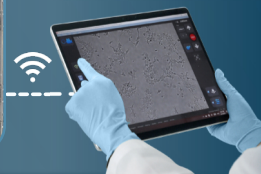
- ▶ Image your cells **inside the incubator**, ensuring a **stable cell environment**
- ▶ **Compact and easy to carry** at only 5.6 kg
- ▶ **Fixed Stage Multi-Point Imaging, Time-Lapse, Image Stitching and Z-Stacking** capability
- ▶ Compatible with most cell culture vessel types
- ▶ **Bright-Field + 2-Color Fluorescence Microscopy** (Green/Red) with LED excitation source
- ▶ Includes user-friendly analysis software
- ▶ 4X / 10X Objective Lens



*Small, lightweight and tablet-compatible:
Ideal for quick cell checks on the go*

CELLOGER NANO

- ▶ **Lightweight and small** - weighs only 3.2 kg
- ▶ **Tablet-Compatible:** Easy wireless data transfer
- ▶ **Bright-Field + 2-Color Fluorescence Microscopy**
- ▶ Designed to operate **inside the incubator**
- ▶ Fixed camera, moving stage with highly precise XYZ controllers
- ▶ Time-lapse video capability
- ▶ 2X / 4X / 10X Objective Lens

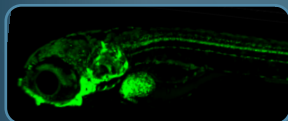
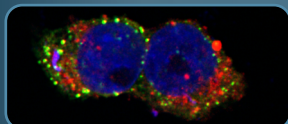
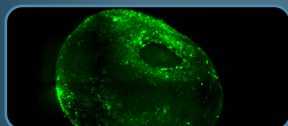




Ultra-fast 3D Fluorescence Imaging

S3000 Spinning-Disk Microscope

- ▶ **Laser-Independent Quick Start** with extended stable operation time
- ▶ **Fast Array Imaging (up to 40 fps)**
- ▶ **Effortless switching of imaging modes**
Switch between fast or high resolution imaging.
- ▶ **Up to 20x Faster** than Point-Scanning
- ▶ **Minimal Bleaching & Phototoxicity**
- ▶ **4+N Multichannel Fluorescence Imaging**
4-position filter block rotary wheel, tool-free replacement and channel switching within 0.2 s.
- ▶ **Full Spectrum detection with LED source**
Excitation: 370-700 nm, Emission: 410-759 nm
- ▶ Modular, space-saving design, user-friendly interface and versatile compatibility



Raman Spectrometry & Confocal Microscopy

P300 Confocal Raman Microscope

- ▶ **Superior Sensitivity**
- ▶ **Effective Weak Raman Signal Collection**
- ▶ **Multi-Dimensional Spectral Calibration**
ensuring exceptional data reproducibility

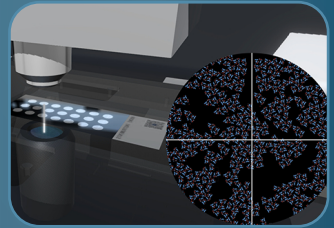


- ▶ **High Spectral Stability** better than 0.01 cm^{-1}
- ▶ Visual index for streamlined and intuitive Raman data interpretation making in-depth spectral analysis more accessible
- ▶ Fully automated identification, localization and detection of targets using morphological reconstruction and multi-field continuous scanning
- ▶ Personalized Database Building

Ultra-precise Single Cell Sorting

PreciSCS Raman Single Cell Sorter

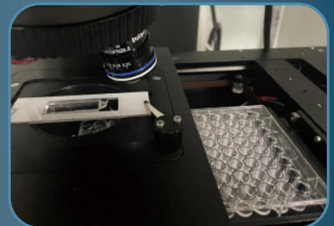
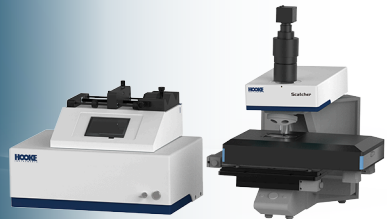
- ▶ **Laser-Induced Forward Transfer (LIFT)** Technology ensures **high-precision sorting** with single-cell isolation success rate of >99%
- ▶ **Ultra-high viability sorting** with a post-sorting culture success rate of over 95%
- ▶ **Raman Spectroscopy for reliable single-cell identification** based on spectral data
- ▶ **Broad Sample Compatibility:** Unaffected by impurity interference, the system is suitable for samples of soil, sputum, water etc.
- ▶ Highly automated workflows using advanced software: Automatic single-cell identification, localization and sorting
- ▶ Can be equipped with an additional fluorescence module



Single-Cell Manipulation and Sorting

Scatcher Optical Tweezers

- ▶ Enables efficient capture, precise manipulation and accurate sorting of single cells
- ▶ Single-cell sorting success rate of >95%
- ▶ **Single-cell culture viability rate of >90%**
- ▶ **Multimodal Single-Cell Recognition** using morphology, fluorescence & Raman spectroscopy
- ▶ Can be seamlessly added to any existing microscope
- ▶ Automated 96-well plate receiving module for customized settings (cells per well, position)
- ▶ Customized Cell Manipulation Chips available

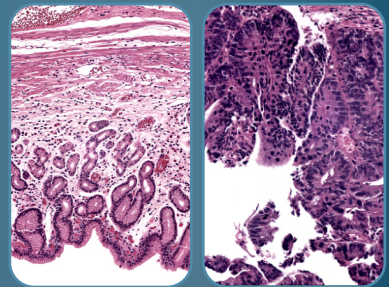




Archive your slides digitally and securely

MSP 320 DIGITAL SLIDE SCANNER

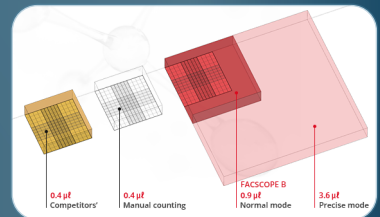
- ▶ Save **high-resolution scans** at 0.19 $\mu\text{m}/\text{pixel}$: Archive slides digitally without wasting space.
- ▶ View even the finest details with **100X zoom**.
- ▶ **Fast scanning, high throughput**: Scan up to 110 slides per hour, and 960 slides per day.
- ▶ Digitize up to **320 slides in one click** - with **fully automated loading & non-stop scanning**
- ▶ **Advanced Stitching Algorithm**: Stitch areas together to produce a whole image.
- ▶ Preview all 16 slides per tray at once and zoom in on the built-in **23" Touchscreen Monitor**
- ▶ **Secure Data Storage**: Select, archive, and download your images via secure servers.



Highly precise cell counting system

FACSCOPE B

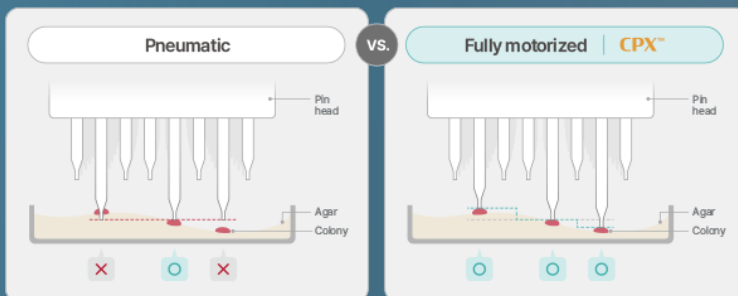
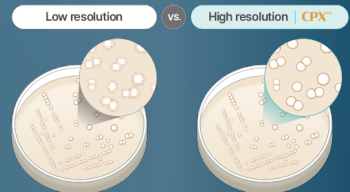
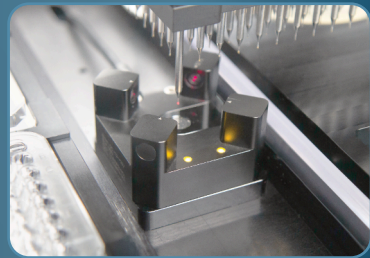
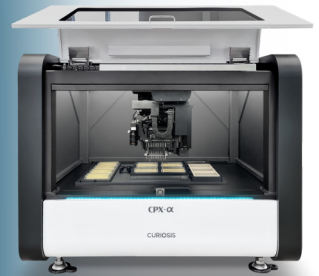
- ▶ **Advanced Cell Detection**: Clearly identify irregular/aggregated cells (size \varnothing 5-60 μm)
- ▶ **Select presets**, gating adjustments and counting modes or save your own presets
- ▶ Stand-alone cell counting system with **glove-friendly LCD touchscreen**
- ▶ **4X bright-field microscopy-based** with enhanced autofocus
- ▶ **Quick mode:** 0.15 μl \approx 20s per test
Normal mode: 0.9 μl \approx 30s per test
Precise mode: 3.6 μl \approx 100s per test
- ▶ **Concentration Range:** $1 \times 10^4 \sim 1 \times 10^7$ cells/ml



Ultra-Precise Cell Colony Picker

CPX-α

- ▶ **>99% Picking Accuracy**
- ▶ **Fully Motorized Pin Actuation**
Adjusts distance and depth of each pin individually to the exact position of every colony
- ▶ **Superior precision and reproducibility** in high-throughput colony picking
- ▶ **Cross-Laser Pin Calibration**
Ensures highest accuracy
- ▶ **High-Resolution Imaging**
Enables detection of colonies as small as 200 μm
- ▶ Versatile source & destination plate compatibility including Petri dishes, OmniTrays, and up to 384-well plates (both shallow and deep)
- ▶ Automates colony identification, selection and transfer for large volumes
- ▶ Seamless integration into automated workflows
- ▶ Interchangeable stainless steel pins
- ▶ Ideal for early-stage colony detection and precise microbial screening and selection



In-Situ Multi-Phenotype Colony Screening with Raman Analysis

RAcolony

- ▶ Combines colony morphological information with Raman spectroscopy data and AI recognition technology for efficient dereplication
- ▶ Automatic transferring of target strains to multi-well plates
- ▶ Highly efficient microbial screening method with counting accuracy exceeding 95%
- ▶ Capture micro images of colonies and analyze features that are visually detectable (like color, size, shape) and difficult to detect (such as smoothness, texture, edges) for comprehensive de-replication analysis



AI MICRO IMAGE ANALYSIS

Analyze over 20 morphological features of colonies to facilitate efficient de-replication analysis.

MODULAR DESIGN

RAcolony can be installed in biosafety cabinets or anaerobic chambers to prevent cross-contamination.

MOLECULAR FINGERPRINT

Using Raman spectroscopy analysis and deep learning allows for precise dereplication of specific microbial strains and accurate screening.

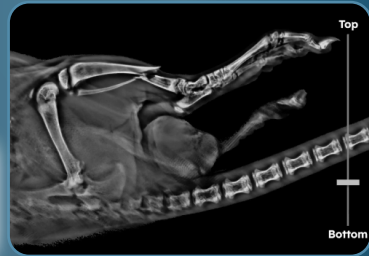
AUTOMATED WORKFLOWS

Obtain phenotypic information and pick and transfer target strains with just one click, using automated single channel or 8-channel picking needles.

3D Tomography + 2D X-ray Imaging with DXA/BMD

PARAMETER 3D

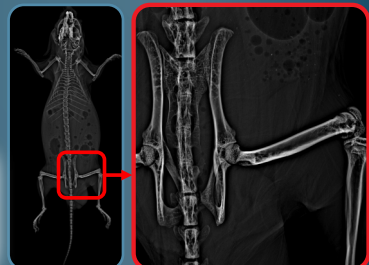
- ▶ **3D X-ray Tomosynthesis with fast scan time** (< 90 seconds, 1mm digital tomosynthesis slices)
- ▶ **High-Resolution 2D X-ray Imaging** at 50 $\mu\text{m}/\text{pixel}$
- ▶ **Body Composition/DXA/BMD Analysis** in mice (2D)
- ▶ **Detector size:** 12 x 15cm (suitable for mice)
- ▶ **Easy 1-click acquisition** with auto exposure
- ▶ **Integrated HD Camera and Image Blender™**
- ▶ 4 Geometric Magnification Levels
- ▶ Automatic Calibration + Zero Warmup
- ▶ X-ray tube current: 20-50 kV
- ▶ Fully shielded and self-contained



High-Res 2D X-ray Imaging + 3D Tomography

PARAMETER SUPRA

- ▶ **3D X-ray Tomosynthesis with fast scan time** (< 90 seconds, 1mm digital tomosynthesis slices)
- ▶ **High-Res 2D X-ray Imaging** at 5 μm focal spot
- ▶ **Large CMOS Detector:** 23 x 29 cm
- ▶ **Easy 1-click acquisition** with auto exposure
- ▶ **Integrated HD Camera and Image Blender™**
- ▶ Up to **5.0X Geometric Magnification** in 4 Levels
- ▶ Automatic Calibration + Zero Warmup
- ▶ X-ray tube current: 24 - 90 kV
- ▶ Fully shielded and self-contained

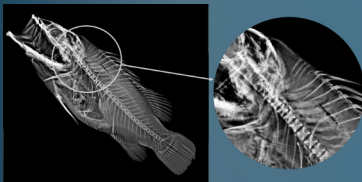




High-Res X-ray Imaging with DXA/BMD Capability

XPERT 80

- ▶ **High Resolution X-rays** with 5 μm focal spot
- ▶ **Body Composition Analysis with DXA/BMD Capability** (mice) with user-friendly software
- ▶ **Large detector size:** 25 x 30 cm (or 12 x 15cm)
- ▶ **Easy 1-click acquisition** with auto exposure
- ▶ **Integrated HD Camera and Image Blender™**
- ▶ 90 kV or 50 kV X-ray tube current for sharp details
- ▶ Automatic Calibration + Zero Warmup
- ▶ Fully shielded and self-contained
- ▶ Benchtop format available



2D X-ray Imaging and Body Composition Analysis

PARAMETER 2D

- ▶ **High-Resolution X-ray Imaging** (50 μm / pixel)
- ▶ **Body Composition Analysis and DXA/BMD Capability** (optimized for mice)
- ▶ **Detector size:** 12 x 15cm (suitable for mice)
- ▶ **Easy 1-click acquisition** with auto exposure
- ▶ **Integrated HD Camera and Image Blender™**
- ▶ Up to 2X Geometric Magnification (4 Levels)
- ▶ Automatic Calibration + Zero Warmup
- ▶ X-ray tube current: 20-50 kV
- ▶ Fully shielded and self-contained



Non-invasive blood vessel imaging

RFLSI-ZW Laser Speckle Contrast Imaging System



- ▶ **NON-CONTACT, HIGH FRAMERATE, HIGH RESOLUTION IMAGING:**
Designed for radioisotope-free and non-invasive microcirculation research.
- ▶ **NO CONTRAST AGENT REQUIRED**
- ▶ **MULTI-OUTPUT:** Easily obtain images, videos, perfusion units and vessel diameter
- ▶ **TRIED AND TRUSTED** by more than 100 renowned research institutes worldwide where the system has contributed to 200+ research papers
- ▶ Free analysis software



WOUND HEALING IN MICE / Image: RWD

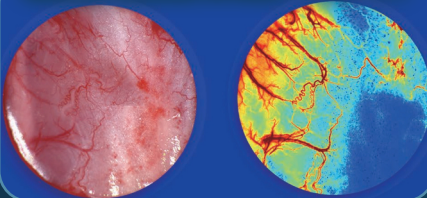
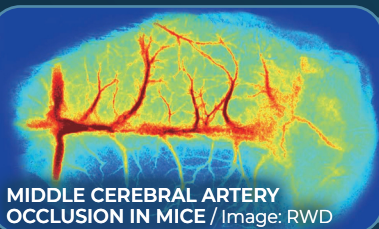
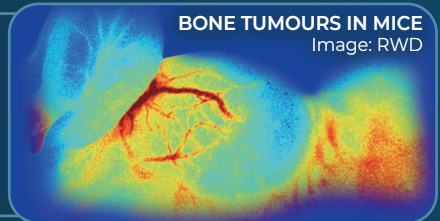


Image any exposed tissue with clarity at **3.9 μm pixel size**. Visualize even delicate blood vessels non-invasively using **fast, reliable autofocus** and **motorized 10x zoom** and advanced image processing.

Capture real-time changes across large areas: The CMOS camera enables high-speed acquisition at **up to 100 fps** for a wide imaging range (0.57 \times 0.75 to 22.5 \times 30 cm²), supporting diverse research needs.

BONE TUMOURS IN MICE
Image: RWD

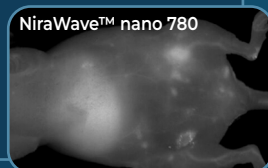
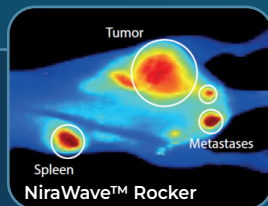


MIDDLE CEREBRAL ARTERY OCCLUSION IN MICE / Image: RWD

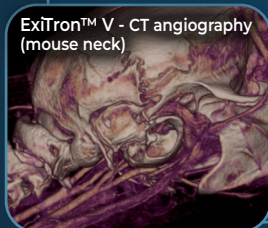
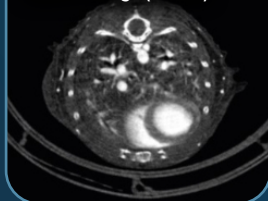
Designed with class 1 lasers, the system is **safe to operate without eye protection**. **Self-calibration** and laser stability hardware ensure consistent results. You can also **sync devices** using the built-in BNC trigger ports.

NiraWave™ for Optical Imaging

- ▶ **NiraWave™ C**
Animal-suitable formulation based on clinical **indocyanine green (ICG)** for various applications including angiography and organ perfusion studies.
- ▶ **NiraWave™ M**
Micellar formulation (ICG). Extended circulation time, ideal for studying **vascular leakage in inflammation**.
- ▶ **NiraWave™ nano 780**
Nanoparticulate agent for **optical angiography** with broad excitation range and **high tissue penetration**.
- ▶ **NiraWave™ Rocker**
Nanoparticle-based agent, optimized for **longterm visualization of primary tumors and metastases**.



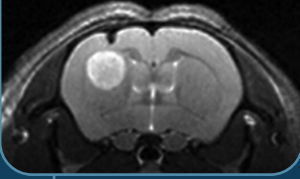
ExiTron™ nano 18000
Axial CT image (mouse)



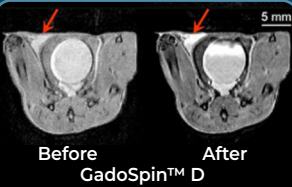
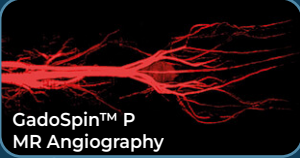
ExiTron™ Contrast Agents for CT

- ▶ **ExiTron™ MyoC 8000**
Specialized for **myocardial** imaging.
- ▶ **ExiTron™ BAT** (iodine-based amphiphile)
Designed for **brown adipose tissue** visualization.
- ▶ **ExiTron™ Ultra 18000**
Innovative nanoparticulate agent that delivers **ultimate contrast in CT angiography** studies.
- ▶ **ExiTron™ nano 12000**
High-resolution vessel imaging for prolonged time.
- ▶ **ExiTron™ nano 6000**
Enables high contrast **liver/spleen imaging for several weeks** after a single injection.
- ▶ **ExiTron™ P**
CT angiography agent for renal excretion
- ▶ **ExiTron™ U and ExiTron™ V**
Reference contrast agents for maximum convenience.

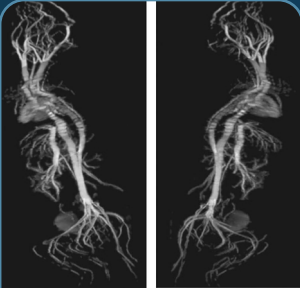
GadoSpin™ M
Intracranial Tumor (Mouse)



GadoSpin™ P
MR Angiography



FeraSpin™ XS Whole-Body
MR Angiography (Mouse)



Contrast Agents for MRI

GadoSpin™ Series (Gadolinium Chelate-Based)

- ▶ **GadoSpin™ F**
Optimized for imaging **atherosclerotic plaques**.
- ▶ **GadoSpin™ P**
Long-circulating **MR angiography** agent for **high-resolution vascular imaging**.
- ▶ **GadoSpin™ D**
For **dynamic contrast-enhanced MRI** studies.
- ▶ **GadoSpin™ M**
Proven **extracellular agent** for general MRI applications and CNS studies.
- ▶ **GadoSpin™ V**
Optimized for **liver imaging**.

FeraSpin™ Series (Iron Oxide Nanoparticles)

- ▶ **FeraSpin™ R:**
Optimized for **liver imaging**.
- ▶ **FeraSpin™ Series XS-XXL**
Superparamagnetic iron oxide nanoparticle agents (10-100 nm), optimized for **vascular MRI**.
- ▶ **FeraSpin™ T**
Ideal for **cell labeling** applications in MRI studies.

WHY CHOOSE VISCOVER'S CONTRAST AGENTS?

Viscover's advanced contrast agents enhance sensitivity and specificity, enabling you to obtain highly detailed visualizations in small animal models. With innovative formulations that surpass clinical standards, Viscover empowers you to achieve precise imaging outcomes.



SCAN TO ORDER

Do you need specific contrast agents that are not listed above?
Request a **customized contrast agent** - we'll take care of it!

Stand-alone, versatile solution for precise FUS in rodents

RK-50 Stereotactic-Guided Focused Ultrasound System

- ▶ **FAST & PRECISE MULTI-POINT TARGETING**
With 3-axis positioning and custom treatment planning software
- ▶ **CUSTOMIZABLE DOSE SETTINGS**
Including continuous and pulsed exposures
- ▶ **OPTIONAL IMAGING**
Enables DICOM-based anatomical targeting
- ▶ **REAL-TIME ACOUSTIC FEEDBACK:**
Control exposure based on acoustic emission from microbubbles
- ▶ **DIVERSE APPLICATIONS**
Multiple transducer frequencies (0.5, 1.2, 1.6 Mhz) with harmonic capabilities for highly versatile use



MRI-guided, precise FUS in rodents

RK-300 MRI-Guided Focused Ultrasound System



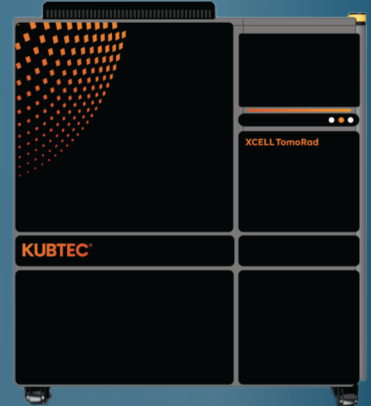
- ▶ **FLEXIBLE MULTI-POINT TARGETING**
Perform non-invasive hyperthermia, ablation, blood brain barrier opening and more within a small bore preclinical MRI system.
- ▶ **DICOM IMAGE TRANSFER**
Integration with Paravision 360 enables DICOM image transfer for planning and real-time MR thermometry
- ▶ **EASY INSTALLATION AND REMOVAL**
from preclinical MRI, no special modifications required
- ▶ **IMAGE BASED TREATMENT PLANNING**
- ▶ **REAL-TIME DYNAMIC IMAGING + ACOUSTIC FEEDBACK**
Live connection with Bruker scanners for dynamic imaging and exposure control, while acoustic feedback helps monitor the treatment process.

A new class of Image-Guided Radiation Therapy (IGRT) System

XCELL TomoRad



- ▶ A new, smarter solution for Image Guided Irradiation, designed to make preclinical IGRT more accessible, budget-friendly and easy to use.
- ▶ **IMAGE-GUIDED PRECISE TREATMENT**
3D Tomosynthesis imaging and optional bioluminescence imaging.
- ▶ **MAG MODE: ULTRA-FAST DOSE DELIVERY**
The sample is automatically positioned near the tube for **dose rates up to 16,25 Gy/min.**
- ▶ **>50% FASTER THAN μ -CT**
Quick and easy 3D reconstruction.
- ▶ Water to Air Cooling System
- ▶ Tube specifications: 30-225 kV, up to 30 mA



EFFICIENT PLANNING

Advanced treatment planning guided by 3D tomosynthesis (1mm slices), based on Monte Carlo Algorithm.

FAST TREATMENT

Precise targeting combined with the unique **Mag Mode** allow for fast dose delivery **up to 16,25 Gy/min.**

AUTOMATIC RECOGNITION

Automatically recognizes filters and collimators, available in various sizes and shapes for diverse applications.

LARGE WORKSPACE

Dimensions (W/D/H): 160 x 81 x 177 cm
Chamber size (W/D/H): 76 x 73 x 73 cm
Volumetric Field of View: 26 x 30 cm

FINE-TUNED CONTROL

With precise, software controlled X/Y/Z animal stage, environmental chamber and quantitative dosimetry commissioning at installation.

OPTIMIZED ANIMAL WELFARE

The environmental chamber ensures optimal conditions for animals with integrated monitoring. Fast, efficient workflows further minimize stress.



World's most powerful benchtop irradiator

XCELL 180

- ▶ Irradiate your samples efficiently with the **highest energy range** available in a benchtop format.
- ▶ **Fits on a laboratory workbench** with a 55 cm x 67 cm (W x D) footprint
- ▶ **Integrated dosimeter for precise control:** Simply set your desired accumulated dose, or enter the desired dose rate.
- ▶ **Maintenance-free**
- ▶ **Quick warm-up**



UNMATCHED ENERGY RANGE

From 20 - 180 kV for fast, effective irradiation over 3 magnification levels - with >3 Gy/min maximum dose output.

LARGE IRRADIATION AREA

With an irradiation area of \varnothing 30.5 cm (80% \pm 5%), the XCELL 180 makes the most out of your valuable lab space.

INTEGRATED TURNTABLE

Ensures homogenous irradiation for all magnification and intensity levels.

LIVE FEED IN HIGH-DEFINITION

View the chamber in real time to make sure your sample placement is correct.

MULTI USER LOGIN

Admins can easily manage users and access master event logs.

USER-FRIENDLY INTERFACE

Easy to use with a large touchscreen and intuitive software controls.

SECURE MOBILE APP

Peace of mind right at your fingertips: Check the system's status and your work's progress from anywhere.

SUITABLE FOR MICE

Irradiate up to 11 mice at once with the optional anesthesia port and KUBTEC's pie cage accessory.

Free-standing irradiators: Versatile and efficient

XCELL 160 / XCELL 225 / XCELL 320



- ▶ **Large chamber size with adjustable sample shelf**
- ▶ Beam coverage: up to Ø 35.5 cm
- ▶ Choose from energy ranges of up to 160kV / 225kV / 320kV
- ▶ **Suitable for small animals** with optional anesthesia port and mouse irradiation kit
- ▶ **Optional X-ray Imaging Capability**
- ▶ **Minimal Maintenance**
- ▶ **Live Feed:** Easily confirm that your mice are still anesthetized or that your sample is still positioned correctly.
- ▶ **Fast, automatic Warm-up** with intelligent tube conditioning
- ▶ Fully shielded and self-contained
- ▶ Includes turntable and integrated dosimeter for precise control.



- Available Accessories:
- ▶ Various collimators and filters
 - ▶ Mouse Irradiation Kit

<u>XCELL 160</u> (160 kV)	<u>XCELL 225</u> (225 kV)	<u>XCELL 320</u> (320 kV)
<ul style="list-style-type: none"> ▶ 1.8 kW or 3.0 kW ▶ Tube current: 0.1 - 30 mA ▶ <u>Dose rates:</u> (filtered, 2.0 mm Al) <ul style="list-style-type: none"> > 2 Gy/min (1.8 kW) > 3.2 Gy/min (3 kW) 	<ul style="list-style-type: none"> ▶ 3.0 kW or 4.0 kW ▶ Tube current: 0.1 - 30 mA ▶ <u>Dose rates:</u> (filtered, 2.0 mm Al) <ul style="list-style-type: none"> > 4.4 Gy/min (3 kW) > 5.6 Gy/min (4 kW) 	<ul style="list-style-type: none"> ▶ Tube current: 0.1 - 30 mA ▶ <u>Dose rate:</u> (filtered, 2.0 mm Al) <ul style="list-style-type: none"> > 6.86 Gy/min (4.0 kW) ▶ Also available in 3.2 kW and 4.2 kW

We deliver global innovations to your lab.

Discover the latest imaging and X-ray irradiation
solutions to advance your pre-clinical research.



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