

Instrument Specifications

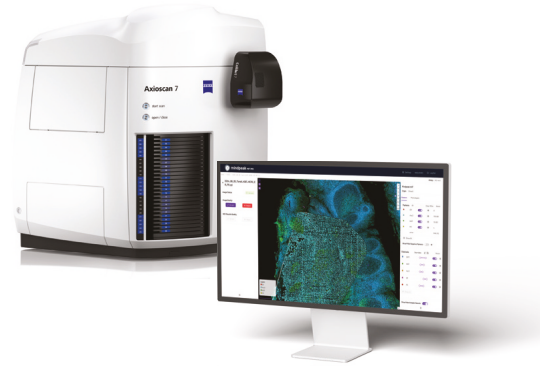
Plex level and Reagents	Off-the-shelf filter set portfolio for up to 8-plex assays. Open choice of reagent chemistry and antibodies.
Slide Capacity	100 slides per run. Hot swapping for 24/7 continuous operation.
Automation level	Robust scan profiles using HDR imaging and AI tissue detection. Information Retrieval with Integrated Barcode Reader. Walk-away Image Acquisition.
Throughput	Over 100 slides per day with multiplexed fluorescence. 10 mm ² tissue area can be scanned in 3 to ~10 minutes for 5- or 8- Plex respectively.
Sample conditions	FFPE and FF tissue, 2-10µm thickness for optimal throughput
Microscope objectives	Wide selection of objectives from 5x to 50x. Selected objective for Spatial Biology configuration: EC Plan-NEOFLUAR 20x/0.5.
Pixel Resolution	170 nm (high resolution mode). 345 nm (high sensitivity mode with 2x2 binning).
Parallel channels	Up to 8 fluorescence channels. Brightfield, TIE phase and relief contrast all in one scan.
Output file format	Established CZI data format. OME-TIFF.
Software	Workflow-drive ZEN Slidescan. Advanced Image Processing and Analysis capabilities. Integrated co-registration feature for cyclic imaging.



ZEISS Axioscan 7 spatial biology: Fast, Simple, Reproducible Imaging

In today's fast-paced research environments, CROs, pharmaceutical industry, and high-throughput imaging labs demand faster, more reliable and reproducible, and automated solutions for spatial biology.

The Axioscan 7 Spatial Biology configuration is designed to address these needs, delivering exceptional speed, sensitivity, and workflow integration optimized for 8-plex multiplex immunofluorescence imaging.



Custom services:

Dedicated team for **Spatial Biology workflow automation**, such as integration of Laboratory Information Management System (LIMS) and Image Management System (IMS) for smooth data management and workflow optimization, and many more services.



Carl Zeiss Microscopy GmbH
Carl-Zeiss-Promenade 10
07745 Jena, Germany

To learn more about our Spatial Biology solution and explore how it can support your work, visit our website by scanning the QR code.

Phone: +49 175 9009056
Email: spatialbiology@zeiss.com
www.zeiss.com/microscopy

Not for therapeutic use, treatment or medical diagnostic evidence. Not all products are available in every country. Contact your local ZEISS representative for more information. EN_46_012_004 | Version 1.0 | CZ 04-2025 | Design, scope of delivery, and technical progress subject to change without notice. | © Carl Zeiss Microscopy GmbH



Seamless Automated Imaging for Spatial Biology at Scale



ZEISS Axioscan 7 spatial biology
Enabling Multiplex Spatial Profiling
with Unmatched Efficiency and Precision

www.zeiss.com/microscopy

Addressing Key Challenges in Multiplex Immunofluorescence

Efficient, high-quality imaging is essential to advancing life sciences research, from analyzing multiple biomarkers in complex tissue samples to supporting a wide range of assays. Traditional imaging workflows, however, face significant hurdles:

Sample Variability

Differences in tissue types and staining can lead to inconsistent results

Manual Image Acquisition

Time-consuming processes increase the risk of errors and reduce throughput.

Workflow Inefficiencies

Multiple imaging steps often lack automation, delaying insights and reducing reproducibility.

ZEISS Axioscan 7 spatial biology addresses these challenges with streamlined workflows that combine high-throughput imaging and robust automation, delivering actionable insights faster and more efficiently than ever before.

High Dynamic Range Imaging

Capture dimmest to brightest samples with one fixed acquisition setting

Effortless Sample and Scan Setting Information Retrieval

Integrated Barcode Reader

High-Throughput Multiplexing Whole Slide Scanner

Efficiently scan over 100 slides per day, 24/7 automated operation

Leverage Advanced AI Capabilities

Automated and Precise Tissue Detection

One Platform Supporting Wide Variety of Life Science Assays

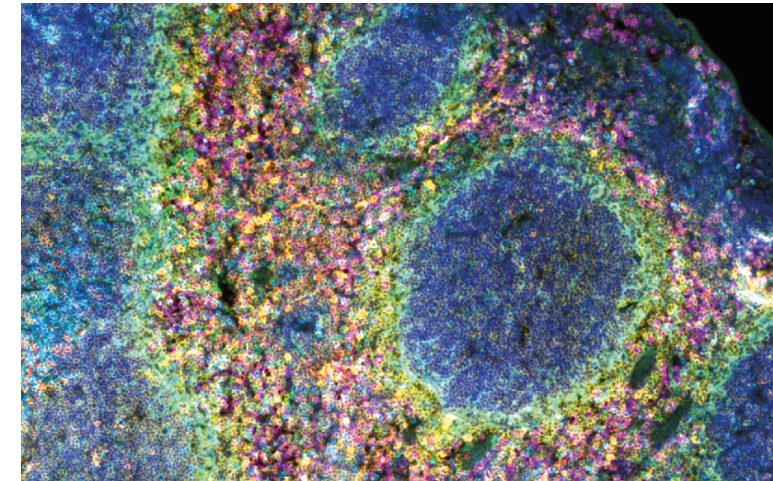
A broad variety of Multiplexing IF assays, FISH, and brightfield

Integrated co-registration feature for cyclic imaging assays

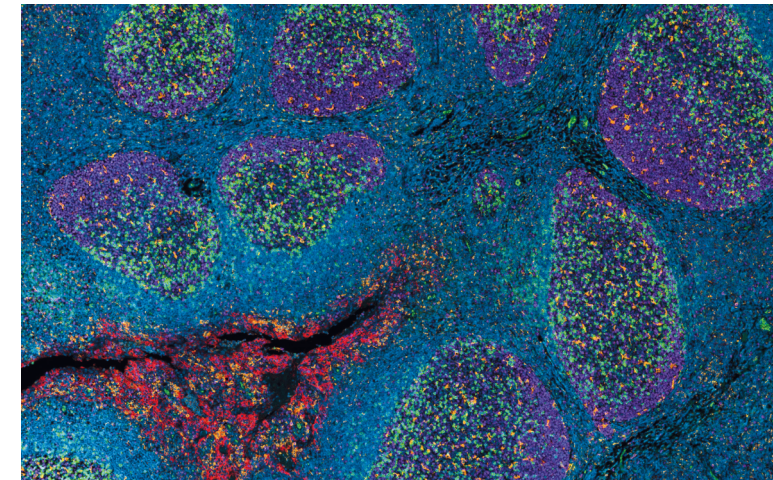
Effortless and precise alignment of images across multiple imaging rounds

8-plex Imaging

Same Section imaging without the Need of spectral unmixing



Multiplex Immunofluorescence images acquired on Axioscan 7. 8-Plex image of Fresh Frozen mouse spleen tissue shows CD4, CD45R, CD8, Gr-1, CD11c, CD169 (white), DAPI



and 5-plex Formalin Fixed Paraffin Embedded human tonsil tissue shows PD-1, CD68, PD-L1, Ki67