

The MACSima™ Platform

Explore the full potential of spatial multiomics

An end-to-end spatial biology platform enabling RNA and protein detection on the same sample

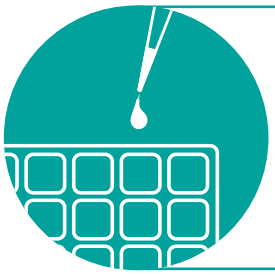
The MACSima™ Platform is an easy-to-use spatial biology solution, enabling the detection of 400+ proteins on the same sample. With the addition of RNAsky® Technology, you can seamlessly combine protein and RNA analysis – measuring up to 24 RNA targets on the same section for true spatial multiomics insight. With our integrated solution, we provide you with everything you need for your streamlined experiments: materials, reagents, and support for sample preparation and experiment planning, the MACSima System for automated experiment execution, and our MACS® iQ View – Spatial Biology Analysis Software to analyze your data and create publication-ready results.



LEARN MORE

Explore the MACSima Platform

▸ **miltenyibiotec.com/MACSima**



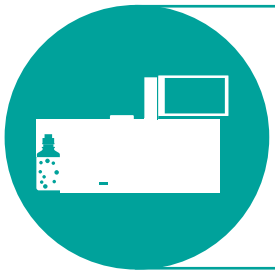
1. Sample preparation

- MACSwell™ Sample Carriers for different sample sizes
- Compatible with 1 mm slides
- PFA-, FFPE- or acetone-fixed tissue sections, TMAs, and adherent cells



2. Flexible panel definition

- 600+ pretested antibody conjugates
- Your own antibodies
- Predefined antibody and RNA panels
- Customized antibody and RNA panels



3. Fully automated experiment execution

- Easy experiment setup on the MACSima System
- Simple loading of samples and reagents
- Fully automated data acquisition



4. Spatial data analysis

- Sophisticated yet simple analysis of spatial multiomics datasets
- Publication-ready results

Same-section spatial multiomics on the MACSima™ Platform

With RNAsky® Design, you can freely define your RNA targets fitting your research (12- or 24-plex). Combine your RNA detection with as many proteins as you wish, on the same sample, by choosing from our 600+ pretested antibody conjugates or plug-and-play antibody panels, or by using your own antibodies.

The easy-to-use MACSima System automatically executes your experiment utilizing our tissue-preserving MICS technology. To get the most out of your data, our MACS iQ View – Spatial Biology Analysis Software supports seamless spatial multiomics data analysis. Characterize new cell types, uncover complex cellular interactions, and explore the tissue microenvironment by combining spatial transcriptomics and protein expression data with ease.

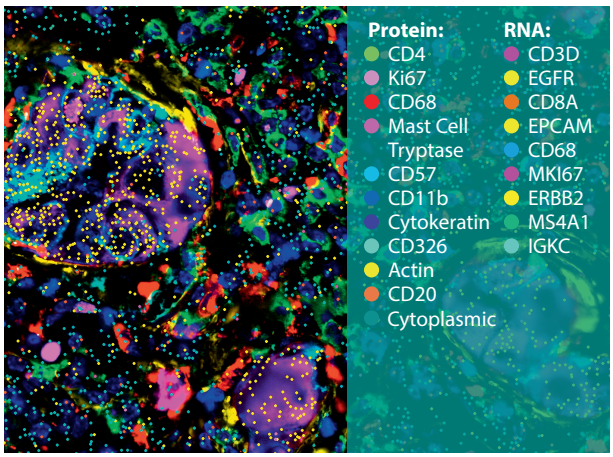


Figure 1: Simultaneous detection and analysis of 40 protein markers and 24 RNAs in non-small lung cancer (NSCLC) FFPE tissue. The image shows selected proteins and RNAs.

Spatial multiomics experiment planning

Combine RNA and protein detection on the same tissue sample.

- Protease-free protocol leaves your epitopes intact.
- Fully customizable RNA targets with RNAsky Design.
- Choose from 600+ pretested antibodies or from antibody panels, or use your own antibodies.

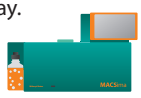
RNAsky Detection Probes + 60+ proteins

12- or 24-plex RNA

Fully automated experiment run on the MACSima System

Minimize hands-on time with easy experiment setup.

- Load reagents and up to four samples.
- Flexibly define your parameters.
- Start the experiment and walk away.



1. RNA detection

2. Protein detection

Spatial multiomics data analysis with MACS iQ View – Spatial Biology

Intuitively analyze your data and unravel new findings with one software solution.

- Cell- and pixel-based segmentation
- Workflow editor
- Gating
- Distance maps, clustering, and dimension reduction
- Data visualization and export, and more

MACS iQ View – Spatial Biology Analysis Software

From instrument setup to publication-ready results in 2 to 9 weeks

Setup and training	Sample preparation, panel design and test	MICS experiment	Data analysis	Publication-ready results
~ 3 to 14 days	**~ 7 to 21 days**	**~ 1 to 7 days**	**~ 4 to 21 days**	

LEARN MORE

Dive into selected references

▸ **miltenyibiotec.com/MACSima-references**

Miltenyi Biotec

Miltenyi Biotec B.V. & Co. KG | Phone +49 2204 8306-0 | Fax +49 2204 85197 | macsde@miltenyi.com | **www.miltenyibiotec.com**

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